Massachusetts Institute of Technology | Global Education & Career Development | 77 Massachusetts Ave., Building E39-305 Cambridge, Massachusetts 02139 | 617-715-5329 gecd@mit.edu

Career Development Handbook 2015-2016

ge|cd MIT Global Education & Career Development

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The *MIT Career Development Handbook* is published once a year, in September, by Global Education & Career Development at the Massachusetts Institute of Technology.

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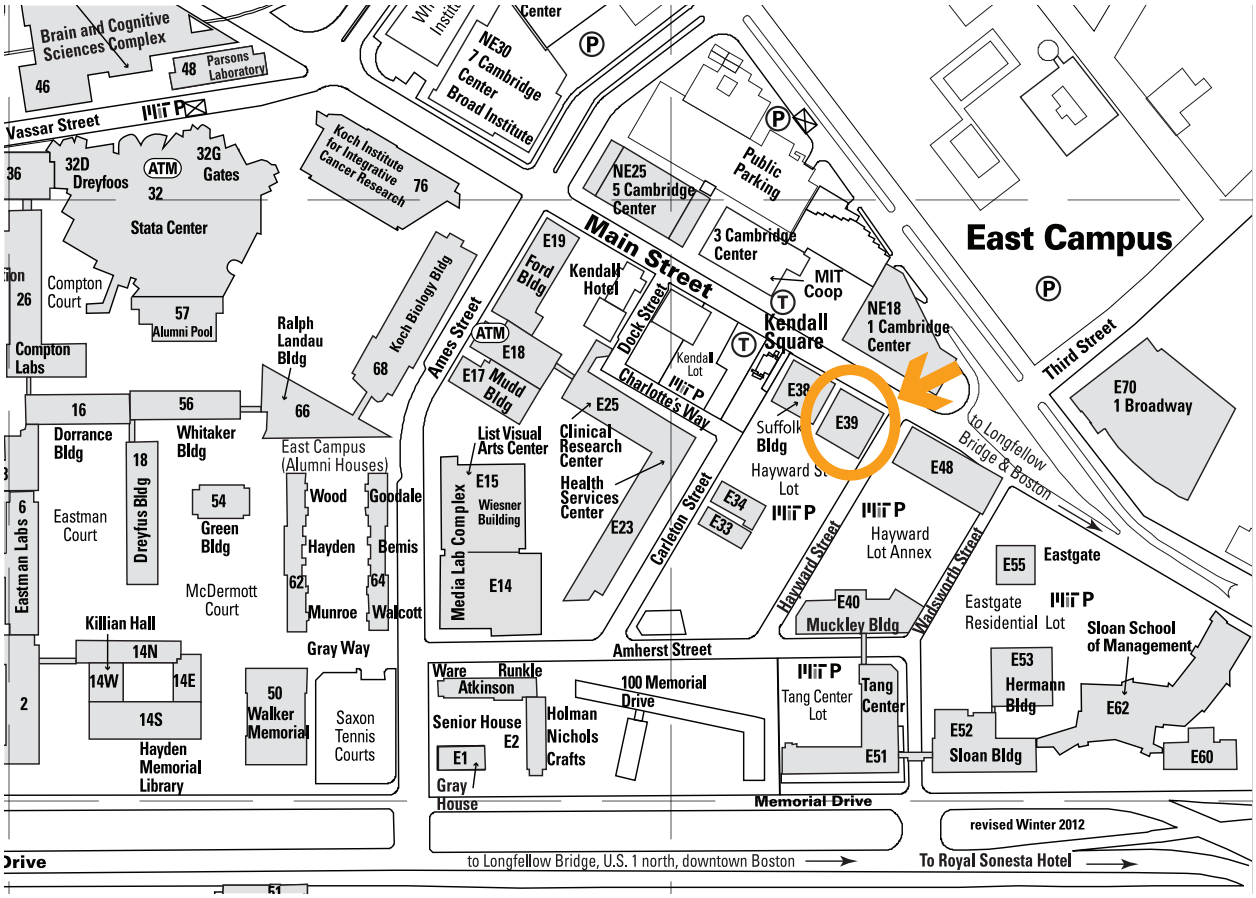
Where is GECD?

Visit us in E39-305, above Cosi's and Rebecca's.
GECD entrance is on Hayward Street.



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ge|cd MIT Global Education & Career Development

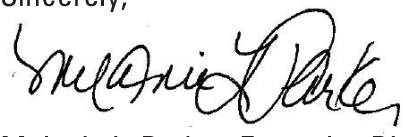
Find your path. Start the journey.

On behalf of MIT Global Education and Career Development (GECD), I am pleased to welcome you to the 2015-16 edition of the MIT Career Development Handbook! As the above tagline indicates, GECD is here to help all MIT students, from freshmen to PhD, achieve lifelong success through career services, global experiences, and connections with graduate schools and employers.

In my meetings with MIT students and alumni, the MIT Career Development Handbook is one of the most frequently cited resources that they rely on for their career planning. The handbook is a "how-to" guide for all aspects of effective career management. The handbook also provides an overview of all that GECD has to offer you during your studies at MIT and beyond. Whether you are exploring your academic major and related careers; seeking an internship; planning to go abroad; searching for a job; or going on to graduate or professional school, GECD offers expert advice and opportunities to help you every step of the way. This handbook begins the conversation about your future, with more in-depth content available through our website, workshops and programs, events connecting you with relevant professionals, and meetings with staff.

Our goal is to engage you in learning and in experiences that will prepare you to effectively manage your career and lifelong learning in a globalized society. So, find your path and start the journey, knowing that GECD is your partner in this endeavor.

Sincerely,



Melanie L. Parker, Executive Director

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Introduction to Global Education & Career Development

We guide all students as they explore and prepare for global opportunities, health professions and careers.

MISSION STATEMENT

Global Education & Career Development empowers MIT students and alumni to achieve lifelong success through seamless access to transformative global experiences, comprehensive and holistic career services and mutually beneficial connections with employers and with graduate and professional schools.

Resources and Services

Welcome to GECD's *Career Development Handbook*! If you are an MIT student at any level — freshman, senior, masters student, doctoral student, or alum — this manual is for you. In the pages that follow, you will find information to help you shape your career while you are here at MIT, as you are launching out into the post-MIT world, and in subsequent years as your career develops and matures.

Following is a brief overview of resources and services we offer. To learn more, please visit our website, **gecd.mit.edu**, stop by E39-305, call our front desk (617-715-5329) or email us at **gecd@mit.edu**.

Our resources include career assessment, online career research tools, employer business card directory, information sessions and workshops, fall and spring on-campus recruiting, counseling appointments, mock interviews, study abroad and distinguished fellowships advising, prehealth advising, career panels, study abroad and career fairs, symposia and other networking opportunities.

GECD website: **gecd.mit.edu** — Our website contains pertinent information about our services, events and programs,and content regarding various career development topics. We hope you will seek it out as it augments the information in this *Handbook*.

Career Services Drop-ins: During the academic year we hold Drop-in Hours daily. Please see our website for our Drop-ins schedule: **gecd.mit.edu/services/appointment**.

Career Services Individual Appointments: Most individual appointments can now be booked online through CareerBridge, **www.myinterfase.com/mit/student**. If you have questions please call us at 617-715-5329.

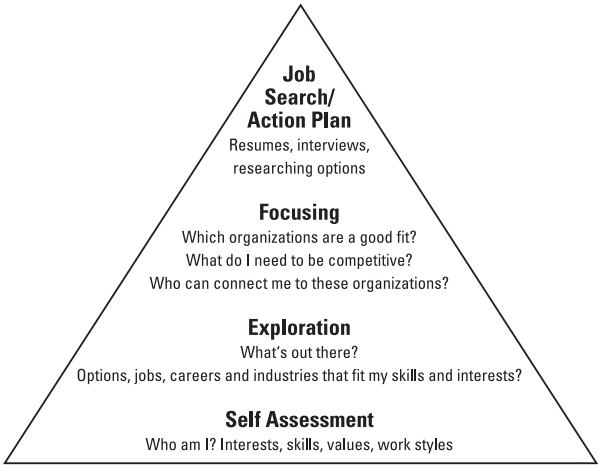
Career Services Workshops: Throughout the academic year, Career Services presents career workshops. Many are tailored to the specific needs of undergraduates, graduate students, international students and prehealth applicants. Many of our workshops are available to read or listen to online. Some topics covered in workshops include:

Self-Assessment
Networking
Resumes, Cover Letters, and CVs
Interview Techniques
Job and Internship Search
Researching Companies
Negotiating Job Offers
Applying to Graduate School

For more information about workshops please visit gecd.mit.edu

Chapter 1
Career Development Process

Career Development Pyramid



Adapted from Peter Fiske: Putting Your Degree to Work: Practical Career Strategies for Scientists, Career Workshop at MIT, May 2010

The pyramid above presents a model for how to help you make informed decisions about your future career direction, and then conduct a successful job search, where "successful" refers to getting a job that is genuinely a good fit for you. Although the process is actually dynamic and there is movement back and forth among the different stages, the model suggests that a successful job search encompasses four basic steps. It begins with Self-Assessment — knowing who you are, moves on to Exploration of what's out there in terms of interesting industries, fields and occupations, progresses to Focusing on specific industries, fields and companies that appeal to you, and then culminates in the nuts-and-bolts Job Search stage—sending out resumes, interviewing, and negotiating job offers.

You might find it helpful to look through the following checklist, Testing Your Career Fitness, to see how ready you currently are to make some career decisions, and conduct a successful job search.

Testing Your Career Fitness

Self-Knowledge

1. I know what motivates me to excel.
2. I can identify my strongest abilities and skills.
3. I have several major achievements that clarify a pattern of interests and abilities.
4. I know what I both like and dislike in work.
5. I have some ideas about what I want to do during the next two to three years.
6. I can list my major accomplishments in action terms.

Knowledge of Employers

7. I know what skills I can offer employers in different occupations.
8. I can clearly explain to employers what I do well and enjoy doing.
9. I can specify why an employer should hire me.
10. When I'm ready to find an internship or job, I will be able to identify and target potential employers.

Internship or Job Search Skills/Contacts

11. I can conduct research on different occupations, employers, organizations and communities.
12. I can write different types of effective resumes, internship search letters, and thank-you notes.
13. I know how to network to develop connections in occupations and companies that interest me.
14. I know websites and other resources where jobs and internships of interest are posted.

Adapted from Jobtrak Job Search Tips where it was reprinted with permission from *Change Your Job, Change Your Life* by Dr. Ronald L. Krannich, 1995, Impact Publications.

Self Assessment

At the base of our model pyramid, providing the essential foundation for career decision making, is self-assessment, or knowing yourself. Thoughtful self-assessment streamlines the remaining steps of the process, helping you to focus on organizations and careers compatible with your goals, and enabling you to market yourself knowledgeably and confidently. Three aspects that are important to consider when choosing a career are: interests, values, and skills. Being able to clearly and selectively articulate these on a resume and during interviews will help employers understand how you will be a good fit for their organization.

Career Services offers several self-assessment inventories to help students with career decision making and career planning. These include the Myers Briggs Type Indicator (MBTI), Strong Interest Inventory, MyPlan, Skills Scan, Values Cards, and StrengthsQuest.

Interests

Our interest in the work we do is a key motivating factor for work. If we are interested in our work, we will find it more enjoyable, be more motivated to learn about it, develop relevant skills, work hard, and persist through difficult challenges. These factors increase our chances of success and job satisfaction.

What are your interests? Think broadly when you answer this question — include work, academics, volunteer and leisure interests. Consider subject areas as well as activities. For example, subjects might include biology, architecture, and economics, while activities could be research, design, and consulting.

Below is a list of questions that may help you identify some of your interests.

1. What do you love to do?
2. What books do you browse through in bookstores?
3. Which are your favorite courses?
4. If you won the lottery, to which causes/issues would you give money?
5. If you were a reporter, what kind of stories would you like to write?
6. What are your favorite objects?
7. What sorts of information do you find most fascinating?
8. Who are your heroes?
9. What did you dream of being when you were 10?

Values

Values are ideals and core beliefs that are important to us; they give meaning and purpose to what we do. We are most likely to be comfortable and thrive in work that is compatible with our own strongly held values. On the other hand, difficulties may arise when we find ourselves in conflict with a work situation because it clashes with our values. Consider the following values as they relate to work. Which ones are most important to you? Least important? Which are very deep and clear? Which are more ambiguous? How do your values impact your career direction and work decisions?

__ Achievement
__ Advancement
__ Adventure
__ Balance: Work/Family
__ Challenge
__ Competition
__ Contribute to Society
__ Creativity
__ Expertise
__ Flexibility
__ Friendship
__ Helping Others
__ High Salary
__ Independence
__ Inner Harmony
__ Job Security
__ Leadership
__ Leisure
__ Location
__ Personal Growth
__ Physical Activity
__ Pleasure
__ Precision
__ Recognition
__ Responsibility
__ Stability
__ Status
__ Variety

Skills

Skills are learned abilities — things we do well. Most students have far more skills than they realize, since they tend to take many of their skills for granted. Do you know what your skills are? Which skills do you like to use? Just because we can do something well doesn't mean that we enjoy doing it. Can you communicate your skills effectively to potential employers?

1) Knowledge-based skills are acquired through education, training and on-the-job experience, e.g., you may be knowledgeable about quasars or Java or the plays of George Bernard Shaw. To think about your knowledge-based skills, ask yourself what subject areas do you know a lot about? Consider academic, work and vocational activities. Which do you enjoy?

2) Transferable skills are actions that can be carried out in different knowledge areas, e.g., writing, data entry and project management. Employers especially want to know what your transferable skills are. To think about your transferable skills, look at the list of action verbs on page 25. These verbs describe skills. How many do you have? Which do you like to use? Which would you like to develop? Are there others not on the list?

Once you have evaluated your interests, values, and skills, how do you put all that information together? Your interests and values will likely point you to certain fields, industries, companies or job functions. Knowledge of your skills will help you determine if those industries, organizations, and job opportunities are likely to offer you work you can skillfully do or learn to do and will enjoy doing. Resources like O*NET (see the shaded box below) can help you make connections between your skills, values, and interests, and occupations that draw on these.

Self-assessment is a lifelong practice, one that most people will return to again and again over the course of their professional careers. As you gain work experience and your skills grow, your interests and values are likely to shift. You can return to this pyramid to help you move confidently into new areas of work and career.

Additional Resources on Self-Assessment

- Myers-Briggs Type Indicator (MBTI) and Strong Interest Inventory — Career Services offers these two popular assessment tools to help students clarify their career-related interests. Meet with a career counselor to learn more about these assessments.
- Skills and Values Card Sorts — Career Services offers these card sorts to help students identify their skills and values, and to clarify which ones they wish to develop or pursue. Meet with a career counselor to learn more about these tools.
- StrengthsQuest—Career Services offers this assessment to help students identify their top strengths and talents, and to think about how these can be expressed in a career. Meet with a career counselor to learn more about this assessment.
- MyPlan — MyPlan offers a collection of self-assessment inventories, which you can take on your own. Access them on CareerBridge, **www.myinterfase.com/mit/student**. Check the Additional Resources page for the listing.
- Peter Fiske's Self-Assessment Exercises — on CareerBridge, **www.myinterfase.com/mit/student** > Resource Library > Graduate Student Materials > Peter Fiske Booklet > Putting Your Science to Work
- John Holland's Self-Directed Search online: www.self-directed-search.com
- O*NET — www.onetonline.org. Use the Advanced Search; from the drop down menu, select skills, interests, etc.; O*NET will generate a list of related occupations with descriptions for you to explore.

Career Development Timeline for Undergraduates

For tips on how to manage your professional development at each stage of your degree program, use the timeline below.

Freshman Year

Adjusting … Get to know yourself. Explore your academic and extracurricular interests and your future goals.

Academics

- ❑ Test your interests through coursework, UROPs, volunteer jobs, and student activities.
- ❑ Meet your professors. Learn how to build your network by taking advantage of their office hours. Get to know at least one professor well every year.
- ❑ Identify four to seven career fields that interest you and research how academic training supports those careers. Meet with a career counselor to discuss majors as they relate to careers. Read up on the careers that interest you. Arrange informational interviews with alumni working in those fields, alum.mit.edu/benefits/CareerGuidance/ICAN.
- ❑ Attend the Choice of Major Fair. Freshmen are expected to pick a major in April, but you may remain "Undecided" until sophomore year.

Career Decision Making

- ❑ Start a Career Log to record your thoughts on academic coursework, future goals, and careers. Create a "college accomplishments" section to record courses taken, extracurricular and volunteer activities, honors/awards, internships, and jobs. Update your Career Log throughout your college career. This log can be used to create a resume and will be helpful when you look for a summer job.
- ❑ Explore the services GECD offers such as career workshops, resume critiques, and mock interviews.
- ❑ Meet with a career counselor to help identify your interests, skills and values.
- ❑ Talk to a career counselor about a summer job or internship in an area that interests you. Consider a summer UROP.
- ❑ Develop a resume to use both on and off campus.
- ❑ Sign up to become a registered user of CareerBridge, see: www.myinterfase.com/mit/student.

Extracurricular Involvement

- ❑ Get involved in dorm activities, student organizations, or public service projects. Explore social and academic clubs that interest you. Join at least one extracurricular activity.
- ❑ Ask for help if you need it! That is what Resident Assistants, Freshman Advisors, Teaching Assistants, and Counselors are for!

Sophomore Year

Exploring … Explore occupations that interest you. Research and network career possibilities.

Academics

- ❑ Confirm your choice of major. Explore a second major or minor if interested.
- ❑ Get involved with your advisor and your department. Schedule at least two meetings per semester with your advisor. Use the time to learn about his/her field and explore your interests in that field. Find out what activities and services are offered to undergraduates in your department.
- ❑ Electives can give you the opportunity to explore a second major or minor as well as to develop a personal interest. Consider targeting your electives to make you more versatile and employable.
- ❑ Explore opportunities for research, UROPs, and creative projects.
- ❑ If interested in studying abroad, begin to research your options. To meet with Global Education advisors see: gecd.mit.edu/goabroad.
- ❑ Learn about Distinguished Fellowship and Scholarship opportunities available to students in various fields. To meet with our Fellowships advisor see: **gecd.mit.edu/fellowships**.

Career Decision Making

- ❑ Update your resume and post it on CareerBridge.
- ❑ Attend career and internship fairs to gather information on different industries and companies.
- ❑ Attend workshops and programs sponsored by GECD to build your career management skills.
- ❑ Explore opportunities to gain relevant work experience, for example: internships, externships, UROPs and summer jobs.
- ❑ Learn how to build your network and cultivate mentors. Conduct informational interviews with people in fields that interest you and record notes in your Career Log. Keep track of contacts!
- ❑ Update your Career Log.

Extracurricular Involvement

- ❑ Attend meetings of student professional organizations. Get involved! This will help you gain skills including teamwork and public speaking.
- ❑ Act on your interests. Take an active role in an extracurricular activity and explore new ones. Consider assuming a leadership role in your dorm, campus organization, or on a class project.
- ❑ Volunteer.

Junior Year

Experiencing…Get experience through internships and summer jobs. Prioritize your interests. Draft your job search or graduate school strategy.

Academics

- ❑ Choose electives that enhance your learning and career goals.
- ❑ If you have not yet done a UROP, seriously consider doing one now, to develop skills and help you explore areas of interest.
- ❑ Explore options and desires to attend graduate or professional school. Consider one to three years of work experience first to enhance learning.
- ❑ Meet with an advisor before spring to discuss graduate school admissions and testing processes.
- ❑ Continue developing relationships with faculty, graduate students, and professionals. Identify who will serve as references for graduate school or employment.
- ❑ Apply to Distinguished Fellowships and Scholarships if appropriate for you. See gecd.mit.edu/fellowships.

Career Decision Making

- ❑ Meet with a Career Counselor to create a job or graduate school search strategy. Also discuss with a counselor effective ways to use web-based job and internship services.
- ❑ Update your Career Log. Use your Career Log entries to help you prioritize career choices.
- ❑ Post an updated resume on CareerBridge.
- ❑ Devote a significant amount of time to finding a summer job or internship or UROP in a field related to your future career goals.
- ❑ Practice networking while getting career information at company presentations, career fairs, career related events/forums, and talking to alums. Keep in touch with previous teachers and advisors.
- ❑ Consider developing a professional profile on LinkedIn, www.linkedin.com. Use it to keep track of—and build—your professional network.
- ❑ Arrange a mock interview at GECD to practice interviewing skills.
- ❑ Shop for business attire so you can "dress for success" in interviews.

Extracurricular Involvement

- ❑ Send for career materials from professional associations and consider joining one as a student member.
- ❑ Continue to explore your values, interests, and skills through involvement with clubs, student organizations, and volunteer activities.

Senior Year

Transitioning…Develop skills you need to accomplish your goals and thrive in life after MIT.

Academics

- ❑ If you are planning to attend graduate or professional school, gather all application forms and write a statement of purpose.
- ❑ Make sure to keep up your grades. Graduate schools and some employers may want to see your final semester grades.

Career Decision Making

- ❑ Visit GECD early in the fall semester to sharpen your job search skills and to take advantage of on-campus recruiting.
- ❑ Talk with professionals in your field about job search techniques and opportunities.
- ❑ Network with parents, friends, faculty, alumni, and others. Most jobs are found through networking.
- ❑ Develop a more active presence on LinkedIn. Join groups, and research people in fields and organizations of interest to you.
- ❑ Tailor your resume to each position for which you are applying and write compelling cover letters. Visit GECD and have your resume and cover letters critiqued.
- ❑ Identify three references and ask permission to use their names.
- ❑ Prepare for interviews by attending an Interview Workshop and doing a mock interview at GECD.
- ❑ Read relevant periodicals and trade journals to understand current issues in your field. Having this insight makes a huge difference during interviews.
- ❑ Analyze job offers based upon the goals and values that you documented in your Career Log. Visit GECD where a Career Counselor can help you walk through this decision.
- ❑ Let GECD know what you are up to for next year by completing the Graduating Student Survey.

Extracurricular Involvement

- ❑ Think about your first year after graduation; your ideal work, proximity to family and friends, lifestyle, values, and long-term goals. It may help to talk about these things with your friends and people whose opinions you value.
- ❑ Start thinking about practical life after MIT. Project your needs and create a realistic budget. Attend seminars regarding finances, work/life balance, managing stress, office politics, etc.
- ❑ Enjoy the end of your senior year and graduation. Congratulations!

Exploring Your Options: Knowing What's Out There

Here are some suggestions for how you can learn about the enormous range of industries and occupations available to you. Think expansively and creatively!

1) Read about industries, organizations, occupations in:
- Occupational Outlook Handbook: www.bls.gov/oco
- O*Net Online: online.onetcenter.org
- Sloan Career Cornerstone Center: www.careercornerstone.org
- Websites, for example: www.collegegrad.com/careers/all.shtml
- Newspapers and magazines
- Trade magazines and newsletters
- Career books and career websites

2) Notice the jobs around you, especially those done by family, friends, acquaintances and others. Ask people about:
- Their career path
- How they feel about their work
- What tips and advice they have to offer

3) Browse the MIT Alumni Directory on: alum.mit.edu and ICAN website: alum.mit.edu/benefits/CareerGuidance/ICAN
- What are alumni from your major doing?
- From other majors?
- Who are they working for?
- Search ICAN for advisor-alums who have said they would be happy to talk to students about their own experience and give career advice.
- Browse Alumni Profiles describing alumni career paths: alum.mit.edu/news/alumniprofiles

4) Talk to business/industry people:
- Talk with your advisor and faculty about opportunities for people with your academic training
- Attend student association events sponsored by various departments
- Take part in career fairs
- Conduct informational interviews with people in occupations and organizations that interest you

How 2014 MIT Graduates Found Their Jobs

	Undergrad	Masters	Doctoral
On-campus recruiting	35.7%	40.1%	11.6%
Networking	31.0%	38.7%	27.5%
Career fair	33.6%	12.7%	8.2%
Internship led to job offer	32.9%	20.1%	4.2%
Directly applied to employer	24.2%	19.5%	24.0%
Other	13.5%	19.3%	--
MIT Sponsored job listings, Employer database, INET	9.4%	9.6%	2.5%
Externally advertised job listing (online, print)	4.0%	4.5%	10.3%
Contacts acquired through MIT career services	2.0%	1.7%	0.6%
Through department	--	--	14.9%
Professional conference	--	--	6.5%

Focusing: Job Search Strategies

Focus on some industries and occupations that appeal to you, and research them in greater depth.

Researching organizations that interest you helps you decide which companies might offer a good fit for your occupational goals and interests. In addition, it is essential preparation prior to interviewing with a company. You can find general guidelines for job and company research at gecd.mit.edu/jobs/find/explore.

What you should know about a company:
- Size of organization (comparison to other companies in industry)
- Number of years in business; history of organization
- Geographical locations, corporate headquarters
- Products and services, clientele
- Background of top management
- Values, company culture
- Organizational structure, climate
- Current financial condition
- Annual sales growth for past five years
- Competition
- Reputation
- Future outlook
- News stories about company; any new developments, trends

Where can you learn about companies and organizations?
- Company websites
- Annual reports: contact companies for copies
- Trade associations: print and web materials
- News articles about companies and executives: newspapers, journals (search online)
- Online references: e.g., Sloan Career Cornerstone Center www.careercornerstone.org
- Directories: e.g., LexisNexis Company Dossier, Standard & Poor's Corporation Records
- Talk to employees (network), MIT alumni directory, LinkedIn

Researching Companies

Knowing which companies or organizations do the work you're interested in is an essential part of your job search. Researching companies allows you to leverage the information you discover by using it to guide your content in your written materials (cover letters, resumes, emails) which you will submit for opportunities. This information helps you prepare for your interviews, and shows the employer you have done your "homework" which strengthens your overall candidacy.

The very research skills and problem-solving methods you currently use here at MIT, can be put to use to research companies or industry areas. Each MIT Course number has a designated librarian. Not only

can the MIT Librarians help with your academic research, but they can also assist you in using the Company databases, Articles databases, Patent databases etc., to research companies. Using these online tools can help you generate lists of companies to target that are specifically doing the type of work, or research, that you want to do! Companies, organizations and labs can be searched by various classifications including geographic areas around the world.

Each MIT Course area also has a library resources guide for each subject or industry area. Follow this link to find your MIT Libraries Subject Area Expert, and view their online guide to specific resources identified for your course/major. libraries.mit.edu/experts

MIT Libraries hold many subscriptions to online databases for your use. Access is free to these directories with your MIT Certificate.

Conducting company research is a significant part of the exploration process in your job search. GECD has many resources that can assist you in conducting company research. gecd.mit.edu/jobs/find/explore.

Job Search Action Plan

Once you have completed your self-assessment, explored different industries and fields, and narrowed your search to a few target industries and companies, you are ready to enter the final stage of the job search — identifying and applying for jobs. Below are some tips for how to go about finding job opportunities. Three job search methods are described: Networking, Using the Hidden Job Market, and the Traditional Job Search.

Networking

Networking is the most effective method of finding a job. It involves talking to as many people as possible about your job search. Networking is expanding your network of professional associates and acquaintances by connecting to other people's network of associates and acquaintances. It can be part of a traditional job search as well as searches using the hidden job market. When networking, you must gather information and seek advice about professions, fields, occupations, trends, skills and expertise required. Get referrals to others who may expedite your job search. Networking is a two-way street. Offer to help the people who are helping you— become an active part of their network.

Hidden Job Market

Many positions are never advertised so how can you find out about them?

Target employers that interest you and identify someone who works for each, talk to him/her about the company, your interests and jobs.

- Do any MIT alumni/ae work for the company?
- Talk to people in your network — does anyone know anyone who works for the company?
- Research to identify the name of someone you can contact
  - Company/organization website
  - Directories (MIT Infinite Connection; LinkedIn)
  - Company Annual Reports
  - News articles — search online

Approach the employer

- Conduct informational interviews and network
- Ask for names of people you might talk with in areas of the company that particularly interest you
- Send a letter of inquiry to a company even if you do not know of an advertised position

Traditional Job Search

You can apply for advertised job vacancies by checking out the following locations.

- CareerBridge — "On-Campus Interviews" and "Job Search": www.myinterfase.com/mit/student
- Newspapers, journals, publications
- Company websites
- Internet jobsites, bulletin boards — e.g., www.simplyhired.com, www.indeed.com, www.Medzilla.com, a pharmaceutical industry site, and www.ieee.org, the electrical engineering association's website
- Listservs
- Notices from MIT Department Administrators
- Head hunters

Record Keeping/Action Planning

Organize your job search. Find a method that works for you. Use an electronic diary, ring binder, file folders, computer reminders, database, or scheduler. Keep track of:

1) Job search ideas
2) Schedule of what you need to do and when:
   - Job application deadlines
   - Networking meetings
   - Follow-up calls to make
   - Interviews scheduled
   - Thank-you notes to be sent out
3) Records of all contacts made and networking leads:
   - Name
   - Dates of all actions
   - Contact information
   - Referred by whom
   - Phone calls, emails, letters
   - Notes about conversations
   - Additional contacts offered
   - Dates when you plan to follow up
4) Industries and companies of interest and your research findings
5) Advertised jobs, relevant research, records of all related actions
6) Jobs applied for:
   - Research on the organization
   - Dates of all actions, contact information
   - Notes on all conversations, email correspondence
   - Copy of cover letters, resumes sent
   - Results
7) Reflections, lessons learned, suggestions for future

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Chapter 2
Internships, Jobs and Networking

Internships: Getting Experience

Internships and research opportunities give you an opportunity to apply academic concepts in practice, and to explore possible future occupations. The experiential learning and skills acquired from internships and/or research experience make you more marketable. MIT offers a variety of programs and some have submission deadlines in the fall semester. If you are seeking an internship overseas, you will need to start your job search process at least six months to a year in advance, depending on the countries that you will be applying to.

Benefits of Internships and Experiential Education Programs include developing transferable skills such as: communication, critical thinking, teamwork, change management, information technology, leadership, self-managed learning, interpersonal diversity, ethics, social responsibility, and technical knowledge.

MIT's Opportunities for Internships and Experiential Learning

Most students are unsure of what they want to do for a profession. Those who think they know may not know how to get where they want to be, or what skills they need in order to be successful in their chosen field. The first step is to explore and experience a field in an area of interest.

Undergraduate Research Opportunities Program (UROP)

Established in 1969, UROP is MIT's flagship academic research program. Participating students work with MIT faculty and research staff on a wide variety of investigative projects, across all disciplines. Most UROP projects take place on campus where students can learn the valuable technical and collaborative skills necessary for future occupations. UROP at MIT is a widely recognized program and employers look upon participation favorably. For more information, consult the UROP website web.mit.edu/urop/, or contact UROP staff in Room 7-104, at urop@mit.edu or (617) 253-7306.

Student/Alumni Externship Program

The Alumni Association's Student/Alumni Externship Program gives students a chance to meet and work with alumni, gain marketable job experience, and explore companies that could become potential employers. Students join alumni in their workplace during the January Independent Activities Period (IAP) and get a first-hand look at a profession. Current undergraduate and graduate MIT students are welcome to apply to the Externship Program. All applicants should submit an application form, resume and cover letter. You will find more information online at alum.mit.edu/students/NetworkwithAlumni/ExternshipProgram or contact the Alumni Association at externship@mit.edu, (617) 252-1143.

Freshman/Alumni Summer Internship Program (F/ASIP)

MIT's F/ASIP is a graded seminar (SP.800/SP.801) that provides freshmen of any major with career development training. Through a series of virtual webinars, live seminars, and assignments, this program helps students explore their career interests, cultivate professional skills, and find summer internships. In addition, participants are paired with MIT alumni mentors who help educate them on what it takes to thrive in the workplace. F/ASIP starts January of freshman year and runs until September.

Interested student should attend an information session and register in the fall of freshman year. For mor information about the program, visit F/ASIP on the web at **gecd.mit.edu/fasip**.

MIT International Science & Technology Initiatives (MISTI)

MISTI is an international internship program offering the opportunity to gain real-life work experience in leading companies and labs around the world. All expenses are paid, including airfare. MISTI country managers work closely with students to find a host and project aligned with their skills and interests. Before departure, students attend MISTI Prep and Training sessions designed to help them explore their host country's language, culture, history and politics. As of 2015, MISTI internships are offered in the following locations: Africa, Belgium, Brazil, Chile, China, France, Germany, India, Israel, Japan, Mexico, Netherlands, Portugal, Singapore, Spain and Switzerland.

Over 700 MIT students intern each year through MISTI programs all over the world. Visit **misti.mit.edu**.

Undergraduate Practice Opportunities Program (UPOP)

UPOP is a full-year professional development program that prepares sophomores of all majors for success in the workplace. Students receive academic training and personalized coaching to foster short- and long-term

professional goals, with ample assistance provided in finding and securing an internship for the summer following sophomore year. Students also benefit from connecting with UPOP's expansive alumni and 2,000+ employer networks in a wide variety of industries.

UPOP students participate in professional development workshops and one-on-one coaching during the fall and spring semesters. Students also attend a one-week course over IAP taught by MIT faculty and coached by successful MIT alums and industry professionals. The course focuses on decision-making, team dynamics, and communication. UPOP's 2-unit curriculum serves as the foundational year of the Bernard M. Gordon-MIT Engineering Leadership Program.

Did you know?
81% of students stated that their summer experience helped to clarify their future career goals.
Source: GECD 2013 Summer Experience Survey

Further information is available by visiting the UPOP office in 1-123, or by contacting staff at upop@mit.edu, (617) 253-0077, or visiting the website at **upop.mit.edu**.

MIT Washington DC Summer Internship Program

The Washington DC Summer Internship Program provides technically sophisticated undergraduates the opportunity to apply their scientific and technical training to public policy issues. The core of the program is focused on the summer months, when students work in the offices of government agencies, the private sector, and advocacy groups. Complementing the summer internships are a trip to Washington DC during spring break and academic exercises. Participating students are required to attend a seminar on the policymaking process during the late spring and early fall, for which they will receive 12 units of credit upon completion. Please see web.mit.edu/summerwash.

VI-A M.Eng. Thesis Program

The VI-A M.Eng. Thesis Program enables EECS students to combine classroom studies with serious professional work experience in industry with competitive salaries through a series of leading-edge technology jobs with participating companies. The VI-A program is designed to work in conjunction with the EECS five-year Master of Engineering degree program culminating in an industry-based master's thesis. VI-A work assignments are available at both domestic and international locations. For more information see via.mit.edu/.

Other Internship Programs and Resources

Internships may be offered at companies, government agencies, nonprofit organizations, other universities, and advocacy groups. Here are some helpful links to find opportunities:

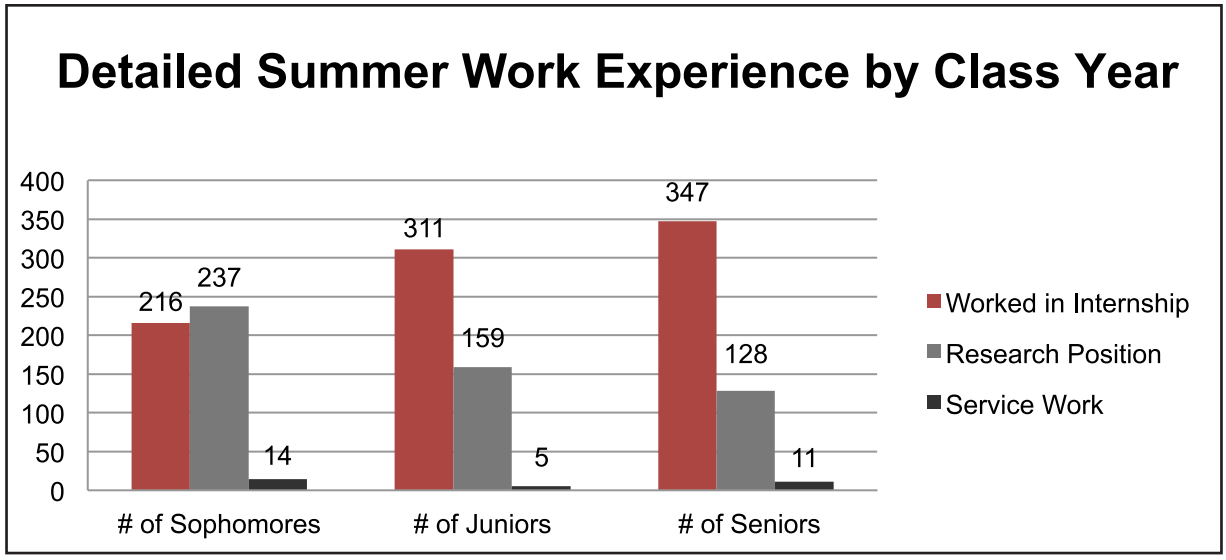
- MIT Career Services Internship Information gecd.mit.edu/jobs/intern/explore
- CareerBridge: see "Job Search" and "On-Campus Recruiting Schedules" www.myinterfase.com/mit/student
- iNet Internship Network: internships available to students from 11 universities, including MIT: inet-csm.symplicity.com/students
- Federal Government Internships: www.usajobs.gov, www.usajobs.gov/StudentsAndGrads
- Nonprofit Internships and Information: www.idealist.org
- Going Global: great resource for international jobs and internships; on CareerBridge under Premium Resources, www.myinterfase.com/mit/student
- Internship Postings through Email Blasts: to sign up go to CareerBridge www.myinterfase.com/mit/student ; on your profile select the box to receive internship emails
- Summer Internship Survey: see what MIT students did during their summer break; go to gecd.mit.edu /resources/data

Do not automatically restrict your search to the Boston area or your hometown — a summer job away from MIT and from home can be fun and broadening. Some companies will help you find housing. Some will offer housing at a local college. If you need to find a place to live for the summer in another city, check out various online housing listings.

Community Service/Volunteering

Similar to internship and jobs, volunteering can provide students with opportunities to gain or enhance skills that employers find relevant and essential in the workplace. Communication, leadership, teamwork, and even networking can be practiced while serving your community. Volunteering can also be a medium for exploring possible career paths. If you are attracted to the idea of combining technical skills while contributing to society, consider career fields such as non-profit consulting, corporate social responsibility, public policy and governance, and international development, to name a few.

Besides developing professional skills, volunteering can be personally enriching, promoting civic responsibility and developing confidence. Companies today are beginning to



Source: GECD 2013 Summer Experience Survey

Did you know?
At least 54% of undergraduates and 23% of master's students completed some sort of service experience while at MIT.

Source: GECD 2014 Graduating Student Survey

realize the importance of giving back and are looking for employees who are well-rounded and are committed to service. The MIT Public Service Center (PSC) provides encouragement, advice, logistical support, and funding to help students engage in meaningful and effective public service work in the local community, throughout the United States, and around the world. To learn more about how the PSC helps MIT achieve its mission of working wisely, creatively, and effectively for the betterment of humankind, visit **web.mit.edu/mitpsc**.

Jobs

MIT has some excellent resources to help you with "traditional" job search methods — responding to advertised positions. Two important resources are: 1) CareerBridge, MIT's Recruiting and Career Management system, which allows companies and organizations to post available job and internship positions for our students to apply to, and 2) Career Fairs, where students can meet employers, learn more about opportunities with their organizations, and in many cases apply for available positions.

CareerBridge

CareerBridge is GECD's Campus Recruiting and Career Management system. We use it for:

- Employers to post jobs—see both "Job Search" and "On-Campus Interviews".
- Managing counseling functions such as appointments, as well as workshop and event registrations.
- Housing some excellent career resources for our students and alumni, including *MyPlan* self-assessment tool, *GoinGlobal* for international jobs and careers and for international students seeking work in the U.S., *The Versatile PhD* for graduate students interested in learning about careers beyond Academia, Peter Fiske's booklet on *Practical Career Strategies for PhDs*, and more.

Sign on at www.myinterfase.com/mit/student and start exploring this excellent resource right away.

Be sure to review the sections on *Exploring Your Options* and *Job Search* in Chapter 1 of this *Handbook*, pages 13 -15 so you understand how to conduct an effective job search. For information on how to find leads through the most effective job search method, networking, please see the final sections in this chapter beginning with *Networking*, pages 20 - 21.

Career Fairs

Career Fairs are a great way to connect with potential employers. Many professional groups hold public career fairs which are advertised on their website, or via email, and social media. At MIT, career fairs are organized and run by a number of student organizations. Career Services holds an annual Career Week in the fall to prepare students for the Fall Career Fair. This is a tremendous opportunity for students to meet a wide variety of employers. GECD hosts the MIT Spring Career Fair which provides another opportunity for students to connect with employers to explore both jobs and internships. Review the GECD website for career fair information. gecd.mit.edu/jobs/find/apply/careerfair. Keep in mind that career fairs should be just one small part of your entire job search process; however, if you're well prepared, they can be a successful part. Here are some useful tips to help make the most of your career fair experience.

Keys to Career Fair Success

Research: Have a plan of attack for the fair. Research the companies and organizations you are interested in and see if any new companies have registered when you arrive at the fair. Take time to survey the layout of the fair and determine where your ideal employers are located.

Attire: Know what is the expected attire of your profession and dress accordingly. It is always better to be overdressed than underdressed.

Resumes: Bring more resumes than you think you will need — at least two for each organization.

Be Proactive: You may only have three minutes to market yourself so be sure to make the most of your time. Start with the basics: approach the company representative in a friendly manner, make eye contact, offer a firm handshake, and show enthusiasm. Recite your brief script (see Step 2: Prepare and Practice Your Script, page 20) and prepare some questions just as you would for any employment interview. The most common question you will face is something along the lines of "what are you here for today?" Obtain a business card or contact information for representatives of organizations that interest you in order to follow up after the fair.

Follow-up: There are two main methods of follow-up. Some suggest calling the recruiter within a day or two of the fair and leaving a voicemail message thanking the recruiter again for his/her time. Another tactic would be to write a thank-you note/email and send it the next day to the address on the recruiter's business card. The content of the note should include thanking the recruiter for his/her time and restating your interest and qualifications for the position.

Questions to Ask Employers at a Career Fair

Your questions should be natural. Before asking questions, introduce yourself and establish rapport with the company reps. Listen carefully to their answers. Be courteous and be sure to thank them before closing the conversation.

Try not to ask questions that could easily be answered by the company's website (e.g., what does your company do?). **Do not read from this list. These are intended as examples of kinds of questions you could ask.**

- Where do MIT grads typically work in your company?
- Did you go to MIT? (Whether or not) What did you major in?
- What do you do at your company?
- How long have you worked there?
- Does your company hire on a continual basis or only at certain times of year?
- How long does your hiring process take?
- What are the most important qualifications your company looks for in an employee?
- Are there particular personality traits you look for?
- What are your company's major goals in the next few years?
- Are graduate degrees important? In what areas within your company?
- What kinds of courses do you suggest in order to be a successful candidate?
- Is there a GPA cut-off for your recruiting process?
- What kinds of entry-level positions exist within your organization that would be open to someone with my background?
- As an entry-level employee, what kind of career advancement opportunities would be open to me in two, or five years from now?
- How many years do entry-level employees typically work for your company? What is your retention rate?
- Do you expect employees to relocate?
- What is the training process like at your company?
- Are there any mentoring opportunities for new professionals?

Global Jobs, Internships and Careers

The professional world you are entering is becoming increasingly international in scope. Employers are interested in employees who have "global intelligence" — skill in dealing with people, products, services, organizations and governments in different countries. As you are developing your career, be sure to consider global opportunities.

We have excellent resources to help you learn more about international options, search for a job abroad, or design a global career if that is your goal. In addition to the resources listed below, see our website, gecd.mit.edu , and search for Global Careers.

Going Global, available on CareerBridge www.myinterfase.com/mit/student , is a great place to start. It is a database of country-specific career and employment information, updated regularly. There are four main functional areas of interest in *Going Global:*

- The Country Career Guides offer country-specific career information and provide expert advice on finding employment at home and abroad.
- The Canada City Career Guides allow you to explore career and employment opportunities in the largest cities across Canada (these are linked to the Country Career Guide for Canada).
- Job and Internship Postings across the globe.
- Employer Directory — search for employers in industries of your choice.
- H1B Information — those carrying this VISA can search for US employers who applied for H1B visas in the prior year. Search by city and state.

Some additional global resources include:

- Go Global Website (**goglobal.mit.edu**): a resource for MIT students to find international opportunities including study abroad, internships, research, teaching and service
- MIT International Science and Technology Initiatives (MISTI, **misti.mit.edu**): internships, teaching and research abroad (see page 16 of this *Handbook*)
- MIT Public Service Center (PSC, **web.mit.edu/mitpsc**): domestic and international service opportunities (see page 18 of this *Handbook*)
- MIT D-Lab (**d-lab.mit.edu**): project-based learning and interdisciplinary courses aimed at designing and disseminating technologies that meaningfully improve the lives of people living in poverty
- Distinguished Fellowships: awards that cover the costs of graduate education and/or international research (see page 70 of this *Handbook*)
- Going Abroad (**www.goabroad.com**): international education and experiential travel resource
- Peace Corps (**www.peacecorps.gov**): extensive international volunteer program run by the American government
- BUNAC (**www.bunac.org**): work and volunteer abroad opportunities popular for gap years
- Global Placement (**www.globalplacement.com**): matches students looking for international internships with companies looking for interns

Networking

Networking Defined

Your professional network is the people you know who can provide leads, support and advice about your career and the job market. They can help you tap the vast majority of jobs that are never advertised. For this reason, networking needs to be an integral part of your job or internship search. The benefits of networking include learning more about career options, increasing your visibility within your field, propelling your professional development, finding suitable mentors, increasing your chances of promotion and perhaps finding your next job or internship. Though initially, you may feel uncomfortable about the notion of networking, it is a skill that can be learned and mastered by following the practical guidelines below.

Start by networking with people you know such as family, friends, faculty, students, community members, alumni, and neighbors. Talk to them about what you want to do. Ask whether they know of any companies or organizations doing the types of things that interest you. Can they connect you with anyone in a related area of work or study who you could talk to in order to gain more information? Networking etiquette requires that you *do not ask for a job or internship*. The focus of networking is to meet many people in your field and find out more about the jobs they do.

Through networking, you can learn firsthand the type of company you want to work for and the type of work that you really want to do. Always approach the experience as asking for advice rather than looking for work. Be courteous and professional at all times, even with your aunt's best friend. Never abuse your privilege by asking for a job or an internship. If you network skillfully, a job or internship may follow.

Step 1: Identify Your Network

Start by listing everyone you know who is a potential prospect and who you can contact.

- Family (parents, siblings, uncles, aunts, cousins)
- Friends
- School contacts (faculty, teachers, classmates, alumni)
- Community associates (religious affiliates, neighbors)
- Work contacts (supervisors, coworkers)
- Professional association members, industry reception attendees, career fair representatives

Step 2: Prepare and Practice Your Script

Prepare a brief introductory script, also known as an "elevator pitch." This should be a one-minute summary of your interests, goals and your needs right now. Practice by sharing your "pitch" with as many people in the above list as you can. Once you are comfortable with your 'pitch', start asking if they know of anyone who you should contact. You can then start contacting these people by phone or email.

A script will sound something like: "I am in my junior year at MIT, and I have a particular interest in Engineering Logistics. I hope to ultimately apply my degree to product and inventory management. Right now I am trying to learn more about the actual experience of people working in these areas. Could you spare some time to speak with me

about the current trends and opportunities in this field?" Or ... "Do you know anyone I could speak with in order to find out more about the field?"

If you have found the contact person through another person your script might be: "My name is Sandra Chee. I am graduating from MIT in 6 months. I received your name from your company's recruiting representative, David Jones, who suggested that I contact you. I am studying biology and David thought that since you are doing work in this field, you might be able to tell me a bit about it. David also thought that you might be able to give me some names of other people or companies that I could approach for a possible informational interview (or summer internship)."

Informational Interviewing

Step 3: Arrange an Informational Interview

This networking/"elevator pitch" script then forms the basis of an email that you might write to someone with whom you would like to have an informational interview. The first networking email may be like a mini cover letter. Use an email subject line that will be clear and that will encourage your reader to open the email — you might write something like: "Question from an MIT Student." If you prefer, you can try to call the person directly to set up an informational interview at a later date. If the person is receptive, remember to accommodate their schedule when deciding on a time to speak.

Prepare for your informational interviews just as you would for an actual job interview. Polish your presentation and listening skills, and conduct preliminary research on the organization. You should outline an agenda that includes well-thought-out questions.

Your networking meeting should include the following elements: introduction, self-overview, Q & A, obtaining referrals and closing. Your networking meeting should not include asking for a position or for your resume to be passed on. Asking someone to pass on your resume is the same as asking for their endorsement, and asking for a job is presumptuous. Focus on gathering information and building a relationship.

Begin your interview with questions that demonstrate your genuine interest in the other person such as, "Could you describe some of the projects (or issues) that you work on?" or "What might a typical work week look like for you?" Then proceed with more general questions such as, "What are the employment prospects in this field?" or "Are you active in any professional organizations in our field and which ones would you recommend?" If appropriate, venture into a series of questions that place the employer in the advice-giving role, such as, "What should the most important consideration be in my first job?" Be sure to ask for referrals to other professionals. You could also ask their opinion about your resume.

Always remember to send a thank-you email or letter to every person who grants you time and to every individual who refers you to someone.

Generally, most people enjoy sharing information about themselves and their jobs and, particularly, giving advice. It is common for professionals to exchange favors and information, so do not hesitate to call upon people.

Keep track of your networking meetings and be proactive with follow-up. Refer to "Record Keeping" on pages 14-15 for guidelines about implementing a job search action plan. Keep a list of your contacts and update it frequently with the names of any leads given to you.

In a group networking setting, circulate and meet people, but do not try to talk to everyone. It is better to have a few meaningful conversations than to have 50 hasty introductions. If you are at a reception, be sure to wear a nametag and to collect or exchange business cards so you can later contact the people you meet. Send a thank-you note or email if appropriate.

Most importantly, remember that networking should be ongoing. You will want to stay in touch with contacts over the long haul — not just when you need something. Make networking part of your long-term career plan.

Company Presentations

MIT hosts employer panels and company presentations. Representatives from industries and companies present on the trends and opportunities of that industry. These may be followed by a reception for attendees.

Try to personally meet the representatives and ask thoughtful questions to gain information about the industry in general and about their company specifically. The person you are networking with may not have a job opening, but he or she may know someone who is hiring. The key is to exchange information and then to expand your network by obtaining additional referrals each time you meet someone new.

Search our website, gecd.mit.edu/jobs/find/apply/company_presentations for company presentations.

Alumni Association Resources

Alumni Directory and the Institute Career Assistance Network (ICAN)

The Institute Career Assistance Network (ICAN) is a searchable database of alumni who volunteer their time as career advisors. It includes more than 3,000 MIT alumni who are willing to share their experiences and offer advice about career paths, interviewing and specific companies. You can communicate with them by telephone, email or in person.

The ICAN website alum.mit.edu/benefits/CareerGuidance/ICAN provides tips for making the contact, conducting a successful informational interview, and a bibliography of recommended career-related publications. To use the online database students must register for an Infinite Connection account at alum.mit.edu. You can also write to: ican@mit.edu.

Social Media

Social media platforms like LinkedIn, Twitter, Facebook, and Google+ can help you stay connected with a grow your network. You can learn more about potential employers and find opportunities by following their pages and posts. You can also establish a presence on these platforms to showcase your work and build your personal brand.

Always be mindful of what you share on the internet regardless of the platform or the privacy settings you use. Don't overshare and don't share publicly when you are angry or upset. Anything can be screen-capped or taken out of context. Imagine how different audienced might react to your posts, such as friends, parents, or coworkers.

LinkedIn is a key social media resource for professional networking. LinkedIn lets you build a profile to attract recruiters and opportunities. You can also keep track of who you know and how, from friends and family to colleagues, classmates, advisors, and potential clients.

GECD offers regular LinkedIn Labs to introduce the basics for using this platform, and our advisors are happy to review profiles and summaries. Here are some tips to get you started with your profile:

- Write a descriptive headline using keywords from your industry
- Use a good quality head shot for your profile picture
- Use the summary to complement your experience section, not repeat it. Talk about your interests and goals.
- Don't just list your experiences. Describe your contributions an accomplishments like you would on a resume (see Chapter 3 of this *Handbook* for more on career writing)
- Endorse others for skills and write thoughtful recommendations
- Follow company pages, join and participate in groups, and use LinkedIn's array of tools to search for opportunities, grow your network and research industries and companies.

For more help with LinkedIn, visit **gecd.mit.edu/linkedin**.

Professional Associations

Professional Associations can be an excellent resource for job seekers. Through their various activities and services (meetings, conferences, publications, websites, etc.) professional associations provide information about career fields, job opportunities, and employers in the professions they serve. They can be particularly helpful if you need to create a long-distance network to help you conduct a long-distance job search.

To identify associations in fields of interest to you, go to Google and type in [your field of interest] + Association.

The websites of professional associations offer access to:

- Information about career options and industry/professional trends in various fields
- Professional contacts: their members form a network of people who are often willing to assist others in career exploration
- Job listings

To learn about professional organizations in your field or in other fields you wish to explore, ask your advisor or other faculty members.

Chapter 3
Resume and Career Writing

Resume Guidelines

Your resume should be a concise summary of the high points of your education, work experience, and other qualifications. It should also be relevant to your audience's needs and to your employment interests, not a complete history of your life. It communicates your professional qualifications to employers, to interest them in interviewing you, and it creates their first impression of you. It is a marketing tool and an introduction to you and your experiences. Do enough research about the employer and the field to decide which messages are most important to your audience, and communicate these messages clearly and succinctly in a visually appealing format. Here are some guidelines to help you do this:

Presentation Checklist

- Do not use a Microsoft Word resume template. Applicant Tracking Systems (ATS) have trouble reading them.
- Use an easy-to-read font, such as Arial or Times New Roman.
- Font size should be 10-12 points.
- Use 8.5″ x 11″ paper, printed on one side only.
- Use .5- to 1-inch margins

Format

- Stick to one page; use two pages if you have an advanced degree or extensive experience (10+ years).
- Make the page easy to scan and graphically pleasing: leave sufficient white space.
- Select a format that suits your qualifications. Do not automatically follow someone else's, which may not suit what you have to say.
- Avoid underlining; you may use bullets to emphasize your credentials.
- Use boldface sparingly for headings and employer information.

Content

- Put your name, address, and phone number at the top of the page. If you have a second page, repeat your name at the top.
- Choose topic headings that invite your readers' interest, e.g., 'Experience', 'Leadership', 'Skills', 'Activities/ Honors' rather than "employment" or "other."
- Do not include an "Objectives" section.
- Include marketable and/or relevant data only; for example, include classes that are most relevant to the type of work you seek; do not provide an extensive list of courses.
- Highlight skills, accomplishments, capabilities, and work experience. Give evidence of your personal impact: show not only that you completed tasks but that you contributed to organizational goals.
- Cite numbers to convey size and/or scale of project, budget, and staff supervised.
- Give examples that demonstrate desirable personality traits such as leadership, teamwork, and initiative.
- Consider adding keywords that apply to your occupation or industry.
- Minimize personal information and omit unrelated memberships, age, marital and health status, and information that is repetitive, implicit (e.g., high school graduation for a college graduate), or out-of-date. If you are a US citizen or hold a permanent resident visa, include this if readers might have reason to think otherwise.
- References are usually omitted. Employers assume that "references are available upon request," so leave this phrase off.

Style

- Proofread to eliminate all spelling, punctuation, and grammatical errors.
- Use action verbs and strong adjectives. (See "Action Verbs.")
- Avoid repeating words or phrases.
- Leave out unnecessary words, sentences, and phrases such as "Duties included / Hired to / Project involved."
- Avoid stilted or confusing language. Ask yourself, "Would I talk like that?"
- Do not use the first person, I, or any pronouns.
- Be consistent and use the same grammatical style throughout.
- Avoid self-flattering terms such as "highly skilled, outstanding, or excellent."
- Be honest and accurate, but not overly modest.
- Convey through the style and content of your resume an understanding of your audience's needs, priorities, hiring criteria, and vocabulary.

Final Edit

- Ask a counselor, friend, or someone unfamiliar with your background to review your resume for clarity and effectiveness.
- Tailor your resume to the specific qualifications of the job for which you are applying and/or to the specific employer.
- Include important information, such as dates of graduation, major, GPA, etc.
- Proofread one more time to ensure correct spelling and punctuation.

The Top 10 Pitfalls in Resume Writing

1. Too long. Restrict your resume to one page.
2. Typographical, grammatical, or spelling errors. Have at least two people proofread your resume.
3. Hard to read. Keep it simple with clean lines and white space.
4. Too verbose. Say as much as possible with as few words as possible, avoid use of jargon.
5. Not enough information. Give dates describing related work experience, be specific about skills, accomplishments, activities, interests, and memberships.
6. Irrelevant information. Customize each resume to each position you seek (when possible). Of course, include education and work experience, but emphasize relevant experience, skills, accomplishments and activities. Do not include marital status, age, sex, children, height, weight, health, church membership, etc.
7. Obviously generic. Tweak each resume according to the job description. The employer needs to feel that you are interested in that particular position with his or her company.
8. Too fancy. Avoid exotic types, colored paper, photographs, binders, and graphics. Electronic resumes should include appropriate industry keywords and use a font size between 10-12 points. Use italics and boldface sparingly.
9. Too static. Make your resume as dynamic as possible. Begin every statement with an action verb. Use active verbs to describe what you have accomplished in past jobs. Take advantage of your rich vocabulary and avoid repeating words, especially the first word in a section.
10. Too modest. The resume showcases your qualifications in competition with the other applicants. Put your best foot forward without misrepresentation, falsification, or arrogance.

Action Verbs

Management Skills
Administered
Analyzed
Assigned
Chaired
Consolidated
Contracted
Coordinated
Delegated
Developed
Directed
Evaluated
Executed
Organized
Oversaw
Planned
Prioritized
Produced
Recommended
Reorganized
Reviewed
Scheduled
Supervised

Communication Skills
Addressed
Arbitrated
Arranged
Authored
Co-authored
Collaborated
Corresponded
Developed
Directed
Drafted
Enlisted
Formulated
Influenced
Interpreted
Lectured
Mediated
Moderated
Negotiated
Persuaded
Promoted
Proposed
Publicized
Reconciled
Recruited
Spoke
Translated
Wrote

Research Skills
Clarified
Collected
Critiqued
Diagnosed
Evaluated
Examined
Extracted
Identified
Inspected
Inspired
Interpreted
Interviewed
Investigated
Organized
Reviewed
Summarized
Surveyed
Systemized

Technical Skills
Assembled
Built
Calculated
Computed
Designed
Devised
Engineered
Fabricated
Maintained
Operated
Pinpointed
Programmed
Remodeled
Repaired
Solved

Teaching Skills
Adapted
Advised
Clarified
Coached
Communicated
Conducted
Coordinated
Developed
Enabled
Encouraged
Evaluated
Explained
Facilitated
Guided
Informed
Instructed
Lectured
Persuaded
Set goals
Stimulated
Taught
Trained

Financial Skills
Administered
Allocated
Analyzed
Appraised
Audited
Balanced
Budgeted
Calculated
Computed
Developed
Managed
Planned
Projected
Researched

Creative Skills
Acted
Conceptualized
Created
Customized
Designed
Developed
Directed
Established
Fashioned
Illustrated
Instituted
Integrated
Performed
Planned
Proved
Revised
Revitalized
Set up
Shaped
Streamlined
Structured
Tabulated
Validated

Helping Skills
Assessed
Assisted
Clarified
Coached
Counseled
Demonstrated
Diagnosed
Educated
Facilitated
Familiarized
Guided
Inspired
Motivated
Participated
Provided
Referred
Rehabilitated
Reinforced
Represented
Supported
Taught
Trained
Verified

Clerical or Detail Skills
Approved
Arranged
Catalogued
Classified
Collected
Compiled
Dispatched
Executed
Filed
Generated
Implemented
Inspected
Monitored
Operated
Ordered
Organized
Prepared
Processed
Purchased
Recorded
Retrieved
Screened
Specified
Systematized

Stronger Verbs for Accomplishments
Accelerated
Achieved
Attained
Completed
Conceived
Convinced
Discovered
Doubled
Effected
Eliminated
Expanded
Expedited
Founded
Improved
Increased
Initiated
Innovated
Introduced
Invented
Launched
Mastered
Originated
Overcame
Overhauled
Pioneered
Reduced
Resolved
Revitalized
Spearheaded
Strengthened
Transformed
Upgraded

From To Boldly Go: Practical Career Advice for Scientists*, by Peter S. Fiske*

Writing About Your Skills — PAR Statements

PAR statements in your resume make it easy for employers to recognize your achievements. They provide a writing formula that stresses your skills and achievements. This is a way of writing out your skills on a resume to maximize their impact.

Using the action verbs listed on the previous page, describe your experience in terms of demonstrated skills and accomplishments in the following format.

1) Describe the **project**, the context, task, job.
2) What **activity** did you do?
3) What were the **results**, outcomes, benefits?

Present the skill as a concrete action that has been done. Do not use the words "took part in," or "gained experience in," or "assisted in."

Quantify the results by stating the amount of dollars saved, the number of clients served, the percentage increase in productivity or improvement in efficiency.

Samples of how to stress your skills:

Before:
Cambridge Performing Center, Cambridge, MA — May 2014-June 2015
Theatre Marketing Intern
Responsibilities included coordinating artist press releases, compiling tracking sheets based on information from reservations and box office attendants, handling photo and press release mailing to media, assisting in radio copy writing and performing various other duties as assigned.

After:
Cambridge Performing Center (CPC), Cambridge, MA — May 2014-June 2015
Theatre Marketing Intern
- Coordinated press releases that contributed to an increase in annual sales by 10%
- Compiled and maintained a mailing list of 10,000 customers, CPC's largest ever
- Organized photo and press releases to XYZ Television and Cambridge Daily News
- Contributed to the copy writing of promotional radio commercials for five events

Before:
Bright Consulting Group, New York, NY — June-August 2015
Marketing Analyst
I analyzed competitive strategies for clients in the bio tech industry. Data gathered assessed profitability of strategies

After:
Bright Consulting Group, New York, NY — June-August 2015
Marketing Analyst
- Assessed profitability of expansion strategy in the biotech industry; results were used by the client to make market entry decision
- Gathered data, as part of a three-member team, by interviewing over 100 potential customers and presented the results to the clients

Below are some further samples of PAR statements (both bullet form and paragraph form are acceptable):

- Investigated effects of gas phase oxygen concentration levels on the differentiation of embryonic stem cells in order to establish optimal settings for growth.
- Designed and implemented a website containing interactive problem sets, information, and announcements for Math competition participants.
- Investigated and evaluated business communication practices and expertise within XYZ Co. to model framework for globalization initiative to improve the sharing and use of existing knowledge.
- Found systematic method to raise glass transition temperature of vaccines, which allowed a higher storage temperature for the vaccines. Generated $5 million annual saving in refrigeration costs.

- Technically advanced and trained the Major Account Sales crew with computerized presentation designs and introduced customer and industry market data software. Organized and developed new methods of reporting and presenting material to top advertisers.
- Reviewed literature and evaluated past models, expanded adaptability of key components, improved stress analyses of fuel forms.
- Consolidated 23 local customer service centers into five regional centers achieving 15% cost reduction and improving customer services.
- Led design efforts of five-member team that developed and manufactured a cooling system for desert combat aviators in 90 days (10 days ahead of the schedule).
- Using critical path scheduling and sub contractor management, successfully organized $3,000,000 pier renewal due to ship collision.
- Wrote software for simulating complex distillation processes that was adopted throughout XYZ Co. leading to significant savings in manufacturing costs.
- Proposed new procedure to streamline the process of reaching optimized fuel design. Produced corresponding computer program using C++ and Fortran, and designed Graphical User Interface (GUI) for better communication with users.
- Created, refined and trained Sales Team on new presentation package and materials. Model was adopted and resulted in a 2% increase in overall company revenue.
- Incorporated new algorithms into pipeline simulation modules and achieved tenfold increase in speed.

Samples of Freshman PAR Statements:

Math Team Captain
Organized review sessions and scored practice tests, leading team to Top 5 finishes in the Arizona State Math League.

National Honor Society Service Chair
Coordinated the Senior Citizens Ball, which raised $1,500 for a new Senior Activities Center.

Swim Instructor
Taught children between the ages of four and six basic swimming techniques to promote water safety and awareness.

Radio Shack Cashier
Communicated product details and provided exceptional customer service to 50+ people per day. Promoted to Assistant Manager after only four months.

Burger King Team Member
Worked in fast-paced environment, received food-handling/ cashier training, and experienced assembly line teamwork.

Country Club Tennis Instructor
Worked with five 12-year-old children and developed their tennis playing ability, as well as cared for their well-being. Provided sunscreen, snacks, supervision, and tennis instruction. Helped to bring about a successful summer with no injuries or complaints.

Freshman Resume

Room 123 MIT Dorm, 987 Institute Drive • Cambridge, MA 02139 • Phone: (617) xxx-xxxx • Email: Freshman@mit.edu

Education

Massachusetts Institute of Technology (MIT) — Cambridge, MA
Candidate for Bachelor of Science in Biology — June 2019
Coursework includes: Calculus, Electricity and Magnetism.

Southtown High School — Southtown, NS
Valedictorian in class of 128 students; SAT: 2260, ACT: 33 — May 2015
Relevant Courses: AP Calculus, AP Statistics, AP Biology.

Leadership Experience

MIT Undergraduate Giving Campaign — Cambridge, MA
Class of 2019 Co-Chair — November 2015
- Trained 12 members from the freshman class in fundraising activities, such as how to ask for a donation and how to properly document a donation.
- Organized a week-long schedule for the 12 members and myself to work at a booth to ask for donations.
- Achieved 31% participation within the freshman class, higher than that of the sophomores and juniors.
- Raised $1,250 from the freshman class for the MIT Public Service Center.

High School Newspaper — Southtown, NS
Chief Editor — August 2014-May 2015
- Proofread each article and authored two to three articles per issue.
- Printed one 24-page newspaper per month for 10 months.
- Oversaw staff of 14 students. Answered questions regarding articles and page design.

Assistant Editor — August 2012-May 2013
Sports Editor — August 2011-May 2012

Relay For Life — W. Southtown, NS
Team Captain — April 2013
- Organized a team of 15 students for the Relay for Life.
- Coordinated fund-raising efforts through the Beta Club, an organization for students with all A's.
- Raised $500 for cancer research.

Work Experience

Area Supermarkets — W. Southtown, NS
Clerk and Bagger — January 2013-May 2013
- Provided customer service to 100+ people per day. Bagged groceries and received cashier training.

Taco Bell — W. Southtown, NS
Team Member — June 2012-January 2013
- Received cashier and food handling training, worked in a fast-paced environment, and experienced assembly-line teamwork. Served 100+ people per day.

Activities & Awards

MIT Varsity Track & Field Team — September 2015-Present
Team Member, Pole Vaulting.

High School Varsity Athletics — August 2011-May 2015
Track and Field, *Captain*; Football, *Team Member*; Wrestling, *Team Member.*

STAR Student Award — March 2014
Awarded to the senior from each high school in Newstate with the highest SAT score.

Havoline Scholar Athlete Award — December 2013
Presented by The National Football Foundation and College Hall of Fame, Inc. to the top 40 scholar athletes in the state of Newstate.

Skills

Computer: Microsoft Word, Excel and PowerPoint

Carpentry: Framing, Masonry, Household Electrical Wiring, Flooring, Roofing, Plumbing.

School Address:
500 Snoots Avenue
Cambridge, MA 02139

Firstyear Resume

firstyear@mit.edu
(xxx) xxx- xxxx

Home Address:
1234 Home Drive
Sometown, XX 12345

Education

Massachusetts Institute of Technology — **Cambridge, MA**
Candidate for Bachelor of Science degree in Aerospace Engineering, Mechanical Engineering — June 2019
Relevant Courses: Mechanics, Electricity and Magnetism, Multivariable Calculus, Differential Equations
Semester 1 GPA: 4.5/5.0

Mytownhigh School — **Los Angeles, CA**
Relevant Courses: AP Physics, AP Calculus, AP Statistics — June 2015
GPA: 4.5/4.0 SAT: 2280

Experience

Rocket Team Lab, Massachusetts Institute of Technology — **Cambridge, MA**
Member — January 2016 – Present
- Participated on a team to build a bi-propellant liquid fueled rocket for June 2015 competition
- Designed and built a motorized valve to regulate fuel and oxidizer flow out of the propellant tanks

Minnich Lab, California Institute of Technology — **Pasadena, CA**
Researcher — June 2014 – May 2015
- Investigated thermoelectric heat waste recovery and power generation in jet engines
- Designed and tested an apparatus for testing thermoelectric modules in combustion-like conditions
- Presented preliminary research to Boeing representatives for potential use on commercial airplanes

Summer Science Program, Westmont College — **Santa Barbara, CA**
Student — June 2014 – Aug. 2014
- Engaged in a rigorous enrichment program in which top high school students from around the world complete a research project in celestial mechanics
- Learned college-level astronomy, physics, calculus, and programming in Python
- Worked with a team to take a series of telescopic observations of near-earth asteroid and wrote a program to model the asteroid's orbit; findings sent to the Minor Planet Center

California Science Center — **Los Angeles, CA**
Discovery Room Volunteer — August 2013
- Taught various science topics using small crafts to groups of up to 15 young children

Leadership

Mytownhigh Robotics Team
Team Captain, Software Captain — Sept. 2012 – May 2015
- Initiated and led a team of 15 students to build and program a robot for competition in the FIRST Tech Challenge League

Mytownhigh Student Academic Advisory Committee
Co-Chair — May 2014 – Mar. 2015
- Facilitated a committee of students to propose academic improvements for the school and presented ideas to senior faculty members

Mytownhigh Violet Key Society
Student Ambassador, Tour Guide — Oct. 2012 – April 2015
- Conducted bi-weekly campus tours to prospective students and their parents

Skills

Computer: Basic Python and MATLAB
Software: Basic SolidWorks, Microsoft Office Suite

Activities

MIT Women's Club Soccer Team, *Member* — Nov. 2015 – Present
MIT Dance Troupe, *Member* — Nov. 2015 – Present
Marlborough Varsity Soccer, *Captain* — Aug. 2012 – Feb. 2015

Awards

Mytownhigh Trustee Award (Well-rounded in scholarship, citizenship, and athletics) — 2015
Cum Laude Society (Top 10 percent of Class, Academic Achievement) — 2014, 2015
National Achievement Scholarship — 2014

JANE DOE

School Address:
XXX Memorial Dr.
Cambridge, MA 02139

someone@mit.edu
(XXX) XXX-XXXX

Home Address:
Someplace, MA

Education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (M.I.T.) — **CAMBRIDGE, MA**
Candidate for B.S. in Biology, GPA: 4.6/5.0 — *20XX*

- Concentration in Management at Sloan Business School and Minor in Brain and Cognitive Sciences.
- Authored 5 publications in the *MIT Undergraduate Research Journal* and other peer-reviewed journals.
- Relevant Coursework: Finance Theory, Economics of the Health Care Industry, Strategic Decision-Making in Life Sciences, Building a Biomedical Business, Cancer Genetics and Therapies, Cellular Neurobiology, Immunology.

Experience

PUTNAM ASSOCIATES — **BURLINGTON, MA**
Analyst — *20XX*

- Evaluated in 6-member team whether client's marketing strategy for its $100M organ transplant drug effectively targets key decision-makers in transplant community. Client implemented proposed improvements in message content and delivery, designed to increase prescriptions for product by nearly 30%.
- Managed recruitment and interviewing process of 98 physicians to obtain primary data for marketing case. Analyzed data from interviews and secondary research in Excel/Access. Prepared PowerPoint deck for presentation to client.
- Analyzed past product switches from predecessor to successor drugs for independent project. Presented recommendations for future drug launches. Developed a database providing key criteria for launching various types of drugs.

MIT PROGRAMS ON THE PHARMACEUTICAL INDUSTRY — **CAMBRIDGE, MA**
Health Economics Research Assistant, Sloan Business School — *20XX*

- Designed, created, and tested a strategic model for the pharmaceutical industry that analyzes safety, efficacy, and economics to forecast (prior to clinical trials) which drugs will succeed on the market. Early elimination of inadequate drugs will significantly reduce the $800M spent to successfully launch a drug.

MERCK & CO., INC. — **RAHWAY, NJ**
Pharmaceutical Laboratory Research Assistant, Infectious Disease Department — *20XX*

- Identified deficiencies in Type 2 Diabetes drugs on the market and screened chemicals on new cellular targets to develop an efficient drug without these shortcomings. Drug predicted to obtain substantially greater market share in the $14B oral Type 2 Diabetes drug market compared to competitors.

MIT CENTER FOR CANCER RESEARCH — **CAMBRIDGE, MA**
Academic Laboratory Research Assistant, Housman Laboratory — *20XX - 20XX*

- Developed a product to recognize activity of a cancer-causing gene, aiding in discovery of drug for brain cancer. Engaged in all stages of product development: identification of market need, engineering of product, collaborating with industry for testing, production, and marketing of final drug.
- Designed a new sequencing technique that refines a common laboratory protocol. New procedure increases efficiency by 50% on average, reducing processing time by 25%, and creating more usable biological end-product.

Leadership

MARCH OF DIMES BIRTH DEFECTS FOUNDATION — **BOSTON, MA**
Director of Massachusetts Youth Public Affairs — *20XX - Present*

- Lobbied legislators to encourage federal, Massachusetts, and California governments to develop public policies to improve the health of women. Introduced and promoted 10 Senate Bills, 4 of which have been approved thus far.
- Represented Foundation on the Massachusetts State Public Affairs Committee.
- Organized conferences and fundraisers as a volunteer for the past 7 years (1998-Present).

JOURNAL OF YOUNG INVESTIGATORS — **CAMBRIDGE, MA**
Story Editor and Science Journalist — *20XX - Present*

- Managed 25 science journalists, delegated writing and editing tasks, and chose articles to print in monthly journal.
- Created daily digests about current science news, distributed to all science journalists.

SCIENCE & ENGINEERING BUSINESS CLUB — **CAMBRIDGE, MA**
Consulting Focus Group Organizing Committee — *20XX - Present*

- Organized 6 campus-wide information session to educate students about careers in consulting and law.
- Selected and worked closely with speakers from diverse occupational backgrounds.

Awards & Interests

- Robert C. Byrd Scholarship, awarded to top 1% of U.S. students for academic excellence.
- Rensselaer Medal, awarded to top 20,000 students worldwide for achievements in mathematics and science.
- Interest in track & field, travel, photography, and oncology.

Matha Maddox

345 Infinity Drive
Cambridge, MA 02139

matha@mit.edu
(617) XXX-XXXX

My Street
My City, My Country

EDUCATION

Massachusetts Institute of Technology (MIT) — **Cambridge, MA**
- Candidate for a Bachelor of Science degree in Mathematics with Computer Science — June 2013
- Candidate for a minor in Management — GPA: 4.6/5.0
- Relevant Coursework: Probability and Statistics, Algebra, Analysis, Discrete Math, Managerial Psychology Laboratory

EXPERIENCE

Telecommunications Company — **Paris, France**
Operations Research Analyst — June 2010 – Present
- Assessed financial risks involved with participating in online advertising-space exchanges
- Devised bidding policies for auctions at the exchanges that led to victories three times out of five and built mathematical models around these policies to increase the company's margin from online ad-spaces by 5%

MIT Sloan School of Management — **Cambridge, MA**
Undergraduate Researcher — June 2010 – October 2010
- Conducted experimental prediction markets with human and artificial intelligence to find the best tools to predict future events such as election-results or the stock market
- Developed an experiment-procedure online that reduced bias by eliminating involvement of the experimenter and saved two hours and $200 per experiment

MIT Center for Collective Intelligence — **Cambridge, MA**
Undergraduate Researcher — June 2010 – October 2010
- Conducted individual and group IQ/EQ tests on human subjects to formulate ways to measure and predict the performance of individuals working as part of a team and the efficacy of the team dynamic
- Saved four hours of experiment-time per day by redesigning the experiment-procedure so that each experiment could be held with three fewer researchers and up to six experiments could be held at the same time

MIT Tech Callers — **Cambridge, MA**
Caller — February 2010 – June 2010
- Communicated with MIT alumni on behalf of the MIT Alumni Association and raised $5,000 in donations

LEADERSHIP

MIT Student Cultural Association — **Cambridge, MA**
Treasurer — May 2010 – Present
- Managed $10,000 worth of finances for a group of 400 students and raised $3,000 in funds for their events
- Created an online system for reimbursements that made the process faster and reduced paperwork

MIT Undergraduate Association — **Cambridge, MA**
Member of Committee on Student Life — February 2011 – Present
- Organized a week long convention of 3,000 students with activities geared towards improving health on campus
- Linked 376 freshmen to upperclassmen with similar career objectives in a one-on-one mentoring relationship

MIT International Science and Technology Initiatives — **Milan, Italy and Cambridge, MA**
Advisor and Teacher — September 2010 – March 2011
- Taught Mathematics and Physics to 500 high school students in Italy and advised teachers on inexpensive ways of making their lessons interactive that helped each school save up to $1300 a year
- Worked with a group of 10 teachers and five principals from high-schools in Italy to prepare a report for the Italian Ministry of Education on how to make the education-system in Italy more hands-on and technology-oriented

The XYZ Newpress — **My City, Country**
Founder and Editor — October 2006 – May 2008
- Led a staff of 25 high-school students to develop the first English newspaper to be printed and distributed in My Country
- Converted it to a trilingual newspaper and increased profitability by 25% in two years

SKILLS

Languages: Fluent - French and Native - Hindi
Software: LATEX, GLPK, Microsoft Office
Activities: Member-Delta Psi Fraternity, Choreographer - MIT Dance Troupe, Journalist -*The Tech*

Student Enviro Eng

Environment St.
Cambridge, MA 02139

Phone: (617) xxx-xxxx
Email: EnviroEng@mit.edu

EDUCATION

Massachusetts Institute of Technology (MIT) – Cambridge, MA
Master of Engineering in Enviromental Engineering 2014 (expected)

- Relevant Coursework: Strategies for Sustainable Business, Systems Dynamics, Sustainable Energy, Applications of Technology in Energy and the Environment, Design for Sustainability

Cornell University – Ithaca, NY
Bachelor of Science in Civil and Environmental Engineering 2010

- GPA 3.57/4.00 (**Cum Laude**), Chi Epsilon Honors Society
- Semester Abroad, University of Melbourne, Melbourne, Australia, 2004
- Relevant Coursework: Engineers for a Sustainable World, Sustainable Small-Scale Water Supplies, Solving Environmental Problems for Urban Regions

EXPERIENCE

Camp Dresser & McKee (CDM) – Cambridge, MA
Environmental Engineer 2010-2012

Harvard University Allston Campus

- Delivered sustainable technology assessment to compliment the campus's low-carbon design strategy. Presented findings to 50 employees through teleconference.
- Managed the design development of the utility system; wrote 4 chapters of 13 chapter report. Coordinated submittal of design report and associated CAD drawings.
- Facilitated a multi-discipline (6), multi-consultant (15) project team; led client, agency and subcontractor communications; developed technical reports and $300,000 budget; managed staff of lower grade levels.
- Technical lead for the evaluation of on-site deep heat geothermal energy; performed a cost analysis and carbon inventory. Wrote 5 of 8 chapters of the feasibility report.
- One of 15 chosen from 4,000 employees to be featured in the company's annual report.

Sustainable Wastewater Treatment Plant Design

- Secured a Massachusetts Technology Collaborative (MTC) grant for the feasibility of converting fats, oils and greases to biofuels to jointly reduce a sewer system nuisance and the plant's reliance on fossil fuels.
- Evaluated sustainable features for a wastewater treatment plant upgrade including an assessment of stormwater management, green building design and construction, and potential energy technologies targeted to reduce operating costs. Recommendations included in 30% project design submittal.

City of Salem Water Conservation Planning

- Developed water conservation recommendations and a comprehensive implementation plan for the city's Engineering Department.
- Recommendations embraced by the City Mayor. Presented findings to the community at a televised public meeting.

Sulabyia, Kuwait Wastewater Treatment Plant

- Evaluated the potential for innovative disposal options for reverse osmosis waste brine at the Sulabyia, Kuwait wastewater treatment plant.
- Specifically evaluated options for wetland treatment, saline farming, irrigation of turf fields, bioreactor landfill water source, phosphorus recovery, and deep well injection.

Engineers for a Sustainable World – Ithaca, NY/La 34, Honduras
Project Team Member 2009-2010

- Designed a water treatment plant for the small village of La 34, a farming community of approximately 100 families near the northwest coast of Honduras.
- Trained community members to self-sufficiently run the water treatment plant; plant is still operating successfully.

Cornell University – Ithaca, NY
Teaching Assistant/Laboratory Assistant 2009-2010

- Helped 40 students design, build and automate miniature water treatment plants using LabVIEW software.
- Facilitated a fluid mechanics laboratory including the setup and supervision of hydraulic experiments.

University of Southern California/Camp Dresser & McKee (CDM) – Los Angeles, CA
Sustainable Cities Undergraduate Fellow 2010

- Worked with diverse team of students, academic and professionals to incorporate urban sustainability into the development of a rapidly expanding Los Angeles School District school system.
- Recommended sustainable features adopted in a prototype environmental impact report.

CERTIFICATIONS AND SKILLS

- Engineer in Training, April 2010
- Hydraulic calculations using MathCAD
- Eligible for Professional Engineering Licensing Exam in 2014
- Water Distribution Modeling using H2OMap Water

Charles Meng

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EDUCATION

Massachusetts Institute of Technology (MIT) *Cambridge, MA*
Candidate for Master of Engineering in Computer Science; GPA: 5.0/5.0 *Expected June 2015*
Bachelor of Science in Computer Science; GPA: 4.6/5.0 *June 2014*

- Concentration: Human-Computer Interaction
- Master's Thesis: "Search Tools for Scaling Expert Code Review to the Global Classroom"
- Relevant Coursework: User Interface Design, Computer Graphics, Design and Analysis of Algorithms, Performance Engineering, Artificial Intelligence, Principles and Practices of Assistive Technologies, Entrepreneurship Project, Computer Vision, Evaluating Education

EXPERIENCE

User Interface Design Group; CSAIL, MIT *Cambridge, MA*
Researcher *Oct. 2013–Present*

- Designing search tools to allow teachers to give qualitative feedback beyond "correct" or "incorrect" to tens of thousands of students' code submissions.
- Building a search engine to increase efficiency of writing feedback to individual students.
- Developing techniques to cluster student code so teachers may powergrade multiple students' code at once.

Assistive Technologies; MIT *Cambridge, MA*
Student leader *Feb. 2014–Present*

- Mentoring students in an MIT undergraduate course in which teams design and build assistive software, hardware, or mechanical devices for an individual in the community living with a disability.
- Founding member of MIT's first assistive technology hackathon, a two-day event based upon the MIT course. Recruited five clients in the greater Boston area.

Introduction to Electrical Engineering and Computer Science; MIT *Cambridge, MA*
Teaching assistant to class of over 500 students *Feb. 2014–Present*

- Manage lab assistants. Lectured to over 100 MIT undergraduates at a review session.

Middle East Education Through Technology (MEET) *Jerusalem, Israel*
Curriculum developer *May–July 2014*

- Developed a 3-week curriculum to teach Israeli and Palestinian high-schoolers web programming and Django.

MIT International Science and Technology Initiative *Querétaro, Mexico*
Curriculum developer and instructor *June–July 2013*

- Established a new computer education class tailored to Mexican street children, independently developed curriculum, and taught class in Spanish.

The Server Labs *Madrid, Spain*
Software engineering intern *June–Aug. 2012*

- Created a user interface to facilitate clients setting up a cloud-based virtual environment.
- Presented project in Spanish before a group of cloud computing professionals.

Affective Computing; Media Lab, MIT *Cambridge, MA*
Undergraduate researcher *June–Dec. 2011*

- Introduced a user interface for CardioCam, a low-cost and non-contact technology that calculates heart rate and blood pressure using only webcam imagery.

SKILLS AND INTERESTS

- Django, WebDev Langugages (HTML, CSS, Javascript, jQuery), Python, C++, Java, MATLAB
- Group leader for MIT Varsity Track and Field pole vaulters
- Spanish ☞ Hebrew ☞ Pole vaulting ☞ Gymnastics ☞ Travel ☞ Music

Joe Resume

77 Massachusetts Avenue
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Phone: 617-253-XXXX
Email: XXX@mit.edu

EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA
Masters of Science in Computer Science and Mechanical Engineering **GPA: 5.0/5.0** 2013 (expected)

Indian Institute of Technology (IIT), Madras, India
Bachelor of Technology, Mechanical Engineering **GPA: 9.5/10.0** 2010

- Class Rank 1. (**Summa cum Laude**) – secured a gold medal and three silver medals for overall excellence.
- Published paper on manufacturing process control-*Intl. Journal of Manufacturing Technology and Management*
- **Standardized Test Score:** GRE – Verbal: 720/800, Quantitative: 800/800.

RELEVANT SKILLS

Software Excel spreadsheets including Sensitivity Analysis, Monte Carlo simulation, and modeling uncertainties; C, C++, Matlab, Saphire (probabilistic analysis tool) MS Word and MS PowerPoint.

Courses Coursework covering fundamentals of finance, economics, statistics, risk-benefit and decision analysis, Options in engineering, and engineering math.

Projects Simulated stock prices using Hidden-Markov-Models (Course - Statistics); researched system design optimization techniques as part of a course portfolio (Course - Engineering Options).

EXPERIENCE

Osio Corporation, Boston, MA
Business Intern 2011 – Present

- Developed Excel spreadsheet model for valuation of the start-up's revenue prospects over the next ten years.
- Collaborated with management team in researching and identifying market segments for the new product.
- Currently working on evaluating strategies to be adopted for market deployment and future expansion.

X Corporation, City, State
Part-time Consultant 2011

- Optimized and redesigned the system to reduce manufacturing costs by 40% and system size by 20%.
- Appraised final results of analysis to senior management at the client site and at MIT. Conducted weekly client update sessions

Center for Product Design, Indian Institute of Science, Bangalore, India
Intern for Program in Teaching Innovation 2010

- Deliberated with professors and fellow students on issues concerning barriers to student learning.
- Identified and specified strategies aimed at teaching innovations and translated them into actionable objectives.
- Implemented a key objective by developing a flexible teaching tool for an advanced graduate course.

Bharat Electronics Limited, Bangalore, India
Technical Analyst 2009

- Analyzed a structural component and identified its critical design parameters.
- Redesigned and optimized the component.

LEADERSHIP

- **Chief Course Coordinator, MIT** – Formulated the syllabus and developed the course content for an undergraduate design engineering course. Organized lectures and led undergraduate assistants in conducting lab tutorials for 200 undergraduate students..
- **Innovative Teaching, MIT:** Formulated new teaching approaches as part of an HP sponsored focus-group trial.
- **Community Service Officer, MIT** – Planned and organized community events for fostering greater interactions amongst graduate students. Received **Outstanding Officer Award** for organizational excellence.
- **Circulation Manager and News Reporter, Graduate Student News Magazine, MIT:** Managed monthly distribution of 5000 copies of magazine on MIT campus. Popularized Cryptic Crosswords at MIT.
- **Mentor, IIT Madras** – Mentored 15 freshmen during the senior year at IIT Madras.

INTERESTS AND ACTIVITIES

Story-Telling ✥ Cryptic-Crosswords ✥ Teaching Innovations ✥ News Reporting ✥ Tennis ✥ Piano

HONORS AND ACHIEVEMENTS

Government of India Fellowship (2006-2010) ✥ Certificates of distinction for National Math, Physics and Chemistry Olympiads ✥ Summa Cum Laude in high school ✥ Ranked in top 0.3% for IITs

Jean Upeg

Political Economy Ave., Cambridge, MA 02139 Phone: (617) xxx-xxxx • Eamil: Upeg@mit.edu

Education

Massachusetts Institute of Technology (MIT), Cambridge, MA Fall 2013
Candidate for PhD in Urban Political Economy and Governance
Dissertation: out of Control? Local Democracy Failure and Fiscal Control Boards

Princeton University, Princeton, NJ 2006
B.S.E., Civil Engineering with Architecture, summa cum laude

Experience

Community Innovators Lab, MIT, Cambridge, MA 2011-current
Project Manager, "Innovation and Equity Transform America:; Research Assistant
- Authored federal taxation memo, coordinated authors, and wrote abstracts for memos to the Presidential Transition Team.
- Drafted grant proposals and policy memos. Participated in designing a model for equitable and comprehensive green retrofits. Currently collaborating with local and national labor and community groups on implementation.

Department of Urban Studies and Planning, MIT, Cambridge, MA 2007-2011
Teaching Assistant
- Conducted seminars, graded essays, and contributed to curriculum design. Classes taught totaled over 200 students and comprised a doctoral research seminar, undergraduate policy course, and three masters planning courses. Conceived and taught graduate mini-seminar.

Brookings Institution, Washington, DC 2010-2011
Brookings Research Fellow
- Awarded first pre-doctoral fellowship for dissertation research granted by the Metropolitan Policy Program.
- Created a dataset compiled from government sources on municipal finances and socioeconomics. Programmed rare-events regressions to measure the impact of fiscal control boards in small cities. Performed qualitative case studies on the control boards of Miami and Washington, DC through interviews with key actors, archival research, and evaluating financial reports.
- Presented at two national academic conferences for Political Science (7,200 attendees) and Planning (1,000 attendees)

P3 Planning Practice Project, MIT, Cambridge, MA 2009-2010
Research Assistant
- Researched four medium-size cities and their innovative community planning organization. Profiled planners of small cities using national survey data. Created and maintained the project website.

Urban Institute, Urban-Brookings Tax Policy Center, Washington, DC 2007-2009
Research Associate II; Research Assistant
- Analyzed tax policy using statistical programs (SAS and Stata), with a focus on the distributional impact of national legislation, the interaction of tax policies and valuation of fringe benefits, and state code relevant to low-income residents.
- Designed, launched, and maintained the Tax Policy Center website for press, policymakers, and researchers. Website received over 12,500 hits per day and was praised by Forbes, National Journal, and Business Week.

New York City Nonprofits Project, New York, NY 2005-2006
Research Assistant
- Developed a strategy to determine the economic impact of the non-profit sector on the city.

Professor Julian Wolpert, Princeton University, Princeton, NJ 2005
Research Assistant
- Wrote a memo detailing the spillover effects of non-profits and value of non-profit tax exemption, focused on Philadelphia.

Fellowships and Awards

National Science Foundation Graduate Research Fellow, 3 years (2009-2012); MIT Presidential Graduate Fellow and Department Fellowship, 3 years (2009); civil and Environmental Engineering Book Award and David W. Carmichael Prize, Princeton (2006).

Professional and Public Service

Student representative, PhD Committee, Department of Urban Studies and Planning, MIT (2009-2011); Graduate Resident Tutor, MIT (2010-2011); High school tutor, Maya Angelou Public Charter School, Washington, DC (2010-2011); Tax preparer for low income households, Community Tax Aid (2008) and Lincoln Park Baptist Church (2008); Washington, DC.

Publications and Conferences

2 first author; 10 co-author; 2 conference presentations; 1 first author manuscript under review (refereed).

Phillip D. Student

77 Massachusetts Ave
Cambridge, MA 02139

xxx-xxx-xxxx
phdstu@mit.edu

PhD candidate in biological engineering and global health seeking to enable more efficient healthcare innovations

Overview

- Research experience applying rigorous quantitative methods to solve life science and human health problems
- Hands-on patient care experience with detailed knowledge of prehospital care /EMS protocols and regulations
- Efficient leader skilled at defining expectations, distributing workload, and coordinating diverse team members
- Comfortable communicating complex data to lay and technical audiences in written, verbal, and visual formats
- Extensive public speaking experience with superior ability to develop compelling and coherent presentations

Education

2014 expected — **Massachusetts Institute of Technology**, School of Engineering – Cambridge, MA
Ph.D. in Biological Engineering, Minor in Global Health Theory and Practice
- Thesis Topics: animal models, antibiotic resistance, infection biomarkers, quantitative biochemistry
- Coursework: Drug Development, Intro to Global Medicine, Business Models for Global Health

2008 — **University of Mississippi**, Sally McDonnell Barksdale Honors College – University, MS
B.S. in Chemistry, Magna Cum Laude, Barksdale Honors Scholar

Work & Research

2008-13 — **Laboratory of Prof. Peter C. Dedon**, MIT Department of Biological Engineering – Cambridge, MA
National Institute of Environmental Health Sciences Doctoral Trainee (2011-13)
National Science Foundation Graduate Research Fellow (2009-11)
- Developed and characterized a new animal model of mycobacterial lung infection for biomarker and drug screening studies that is safer and cheaper than existing models (manuscript in preparation)
- Discovered and partly characterized a new potential mechanism of transferable antibiotic resistance
- Coordinated work with 5-7 veterinarians, research scientists, graduate students, and undergraduates
- Mentored and supervised 3 undergraduates in complementary research projects over 3 semesters
- Deliverables: 2 international conferences, 1 publication, 3 manuscripts currently in preparation

2013 — **ClearView Healthcare Partners** – Newton, MA
Connect to ClearView Participant
- Selected as one of 11 graduate students (out of ≈150) for a three-day consulting immersion program
- Worked in a team of 4 students under a Senior Engagement Manager to simulate analyzing market landscape, modeling uptake scenarios, and forecasting peak revenue for a pipeline therapeutic

2009-12 — **MIT Emergency Medical Services** – Cambridge, MA
Director of Ambulance Operations (2010-11)
Emergency Medical Technician: Basic (2009-12)
- Facilitated integration of campus ambulance into local 911 system, yielding a 7% increase in calls
- Created routine maintenance and incident tracking programs, reducing ambulance downtime 25%
- Evaluated vendor bids, performed cost projection, and negotiated major purchases totaling ≈$13,000
- Coordinated and led campus-wide medical coverage for 3 large events, each with ≈2,000 visitors
- Advised MIT Medical on revising clinic hours and services to lower costs and improve efficiency
- Volunteered ≈1,000 hours leading teams of 3 EMTs in treating and transporting ≈100 patients

Leadership

2013-14 — **MIT Medical Consumers' Advisory Council** – Cambridge, MA
Graduate Student Representative
- Chosen to represent the graduate student population to the MIT Medical Management Board
- Solicit student input, communicate criticisms, and suggest improvements to healthcare services

2013 **MIT-Imperial College London Global Fellows Program** – Sharon, MA
Global Leadership Fellow
- Chosen as one of 20 PhD students to represent MIT at a week-long leadership training program
- Received training in global collaborations, team management, and intercultural communication

2009-10 **MIT Graduate Student Council** – Cambridge, MA
Activities Committee Chair
- Conceived, planned, and staffed monthly social activities for 100+ graduate students
- Designed, allocated, dispersed, and tracked an annual events budget of ≈$67,000
- Instituted cost-saving changes and revenue-raising measures to offset a 10% budget cut

Teaching & Outreach

2013 **MIT Department of Biological Engineering** – Cambridge, MA
Teaching Assistant for 20.201: Fundamentals of Drug Development
- Helped plan lecture schedule and evaluated case study topics with pharma industry guest speakers
- Lead weekly recitation sessions, grade homework, and provide case study feedback for ≈30 students

2012-13 **MIT Center for Environmental Health Sciences** – Cambridge, MA
High School Outreach Volunteer
- Helped plan and staff fieldtrips to MIT laboratories for advanced high school science classes
- Designed handouts on analytical chemistry, and demonstrated HPLC to groups of ≈12 students

2012 **MIT Department of Biological Engineering** – Cambridge, MA
Fellowship Mentor and Writing Coach
- Mentored 4 undergraduates in applying for nationally competitive graduate research fellowships
- Edited both personal and research essays, and gave individual feedback and group Q&A sessions

2010-11 **MIT Department of Biological Engineering** – Cambridge, MA
Teaching Assistant for 20.440: Analysis of Biological Networks
- Conceived, wrote, and graded problem sets and exam questions for 25 graduate students
- Designed and presented exam preparation sessions and short in-class lectures on special topics
- Rated best of 3 instructors in presentation quality by students in course evaluations 2 years in a row

Skills & Interests

Technical: animal models of disease, bacterial pathogenesis, microbiological assay design, antibiotic resistance, drug sensitivity testing, inflammation, biomarkers, metabolomics, PK/PD and ADME-Tox, PCA, ANOVA

Laboratory: chromatography (HPLC/UPLC), mass spectrometry (QTOF, QQQ, MALDI), LC-MS, flow cytometry

Computer: MATLAB, Mathematica, GraphPad Prism, MassHunter, LaTeX, Microsoft Office, (X)HTML, CSS

Personal: history of medicine, medical anthropology, travel writing, web design, typography, canoeing / kayaking

Honors & Awards

2013-14 Siebel Scholars Award (85 awarded annually, funds final year, valued at $35,000)
2011-13 National Institute of Environmental Health Sciences Training Grant (funds 3 years, valued at $90,000)
2011 MIT Sloan Sales Club Bold Sell Competition Winner (best of 32 sales pitches, final audience of ≈100)
2009-11 National Science Foundation Graduate Research Fellowship (funds 3 years, valued at $120,000)
2007-08 Barry M. Goldwater Scholarship (funds 2 years, valued at $15,000)
2004-08 University of Mississippi Carrier Scholarship (2 awarded annually, funds 4 years, valued at $40,000)
2003 Eagle Scout, Boy Scout Troop 911 – Brookhaven, MS

Ph.D. Interested in Consulting

Rm. E39-305, M.I.T., 77 Mass Ave. • Cambridge, MA 02139 • Phone: 617-XXX-XXXX • Email: imastudent@mit.edu

Education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY **Cambridge, MA**
Candidate for Ph.D. degree in Material Science & Engineering, June 2014 Used stochastic simulation techniques to gain new insights into polymer structure. Established collaboration with experimental group in the Mechanical Engineering Dept. Pursuing unique integrated approach to develop new molecular models better suited to designing optimal industrial processes. *GPA: 4.9/5.0*
Minor: **Business Administration at the Sloan School of Management, MIT**
Business Courses: Management of Innovation and Technology, International Management, Entrepreneurship, Microeconomics, Macroeconomics, Management and Policy in the International Economy, Marketing, Finance Theory, Options and Derivatives, Investment Banking, Operations Research.
Master of Science in Chemical Engineering Practice, January 2009.

TRINITY COLLEGE, CAMBRIDGE UNIVERSITY **United Kingdom**
Master of Engineering, June 2006 Class Rank: 2
Bachelor of Arts with Honors in Natural Science and Chemical Engineering, June 2005 Class Rank: 1

Experience

INDUSTRY INTERNSHIPS
MERCK PHARMACEUTICALS (Summer 2008) **West Point, PA**
Team Leader: Found systematic method to raise glass transition temperature of vaccines. This allowed a higher storage temperature for the vaccines. Generated $5million annual saving in refrigeration costs.

DOW CHEMICALS (Summer 2007) **Plaquemine, LO**
Intern: Wrote software for simulating complex distillation processes, adopted throughout Dow Chemicals.

DOW-CORNING (September-November 2007) **Midland, MI**
Team Leader: Removed a bottleneck to allowing doubling of a plant's capacity. $10million capital savings.

UNITED KINGDOM ATOMIC ENERGY AUTHORITY (Summers, 2001-2005) **United Kingdom**
Intern:Worked for fluid mechanics groups on technical consulting projects for the petroleum industry. Frequently delivered presentations to clients. Incorporated new algorithms into pipeline simulation modules and achieved tenfold increase in speed. Developed strategies to reduce pipeline erosion. Improved reliability of flowrate measurement devices in oil pipelines to allow clients to better monitor throughputs.

Leadership

MIT PRESIDENT, STUDENT LEADERSHIP COUNCIL OF MATERIAL SCIENTISTS (2011 - present)
Leader in group of 200 students that promotes collaboration between five major research universities. Organized videoconferences to allow students to share research ideas. Planning summer retreat to further student collaboration. Investigating ways to promote science and technology in secondary schools and the community.

STUDENT REPRESENTATIVE, MIT MATERIAL SCIENCE & ENGINEERING DEPT. STUDENT AFFAIRS COMMITTEE (2011 - present)
Leading student / faculty discussion on ways to enhance student / advisor interaction.

TEACHING ASSISTANT, MIT MATERIAL SCIENCE & ENGINEERING DEPT. (Fall semester 2010)
Organized tutorials to clarify course material. Wrote instruction manual to help students use math software. Class scored 7% higher in final than any of the professor's former classes.

U.K. COORDINATOR, EUROPEAN CLUB CAREER FAIR (2006)

Awards, Honors

Winner of National Science Foundation Poster Competition (1012); **Sigma Xi Engineering Research Honors Society** (2010); **Harvey Stern Fellowship**, MIT (2009); **Fox Prize** for Outstanding Performance in Chemical Engineering, Cambridge University (2006); Verhaydn de Lancy Prize for Outstanding Contribution to Trinity College (2005); **Mobil Prize** for Best Performance in Chemical Engineering, Cambridge University (2005); **Senior Scholarship** for Outstanding Academic Performance, Trinity College, Cambridge (2004); **Student Scholarship,** United Kingdom Atomic Energy Authority (2002-2006)

Activities

Dancing (MIT Salsa Club), Classical Guitar, MIT Debating Club, MIT European Club Soccer Team

A.N. ALUM

123 Infinity Avenue, Cambridge, MA 02139, analum@alum.mit.edu, 617-XXX-XXXX

SUMMARY

Accomplished strategy and finance professional with extensive experience in health care, financial services, energy, and education. Proven track record of improving client and firm performance across a broad range of corporate, not-for-proft, and government organizations. Strong ability to manage senior-level relationships and cross-functional teams.

EXPERIENCE

MIT MEDIA LAB, Cambridge, MA, 2012-Present
- Co-led development of virtual rehabilitation interface integrating clinical and home-based physical therapy.
- Interviewed clinicians to determine key specifications required for effective treatment in home and clinical settings.
- Collaborated on proposal that won $100,000 innovation grant to further develop technology.

XYZ PUBLIC CHARTER SCHOOLS, Washington, DC, 2011
- Led development and initial launch of performance management system to improve operational and academic excellence of network of ten schools with over 5,000 students, 500 staff, and $70 million operating budget.

GLOBAL INVESTMENT FIRM, New York, NY and San Francisco, CA, 2009-2011
Senior Associate, Global Analytics
- Managed financial analysis and due diligence for over $2 billion in private equity financing for investment acquisition targets in transportation, energy, clean technology, and real estate sectors. Negotiated and oversaw contracts and relationships with engineering, real estate, accounting, and investment banking advisory firms.
- Evaluated strategic market opportunities in clean technology sector, including potential investments in wind turbine technology and carbon markets. Firm subsequently invested in several carbon reduction projects.
- Delivered presentations on strategic analysis, financial valuation, and due diligence of potential investments to Board members and senior executives of Babcock & Brown, portfolio companies, and prospective investment targets.
- Streamlined investment review process firmwide, resulting in improved financial and risk analysis.

AN INVESTMENT BANK, New York, NY, 2002-2006
U.S. Economist, Associate Director
- Collaborated with retail and institutional investor sales force to increase distribution of U.S. economics research products that reached hundreds of thousands of clients. Advised large institutional investor clients on U.S. economics forecasts and research products and conducted customized client research.
- Managed launch of new research products from concept to distribution across sales channels. Led writing, production, and distribution of 200-page Data Decoder reference book, successfully positioned as flagship UBS research product
- Spearheaded integration of people, processes, and systems between PaineWebber U.S. Economics Team and UBS Global Economics Team following merger. Completed full integration six months prior to all other Research Teams and advised senior management on integration of remaining 150 PaineWebber Analysts.

WORLD BANK, Washington, DC, 2002-2003
Research Analyst, Development Economics Research Group
- Evaluated capital structure and corporate governance of 4,000 firms in Indonesia, Korea, Malaysia, Philippines, and Thailand before and after 1997 financial crisis to inform policy response.
- Prepared reports and presentations of survey findings for senior government officials, global business leaders, senior World Bank officials, and international press. Organized conference in Bangkok for key Asian cabinet ministers and World Bank officials to discuss findings.
- Designed and evaluated randomized trials of education programs across 300 schools in Kenya. Led 10-person team in overhaul of data management process to improve accuracy and analysis of 20,000 student records.

EDUCATION

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA
The Wharton School, *Master of Business Administration, Major in Finance*. August 2008.
Graduate School of Education, *Master of Science in Education, Major in Educational Leadership*. May 2007
- Extensive experience in strategic planning and business development for organizations including Mastery Charter Schools, Victory Schools, School District of Philadelphia, and Association for Sustainable Economic Development.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, MA
Bachelor of Science, Major in Economics. June 2000. GPA: 4.5/5.0

ADDITIONAL INFORMATION

- **Computer skills:** Competency in Excel financial modeling, Powerpoint, Access, SQL, SAS, Windows, and Mac OS.
- **Languages:** Written and spoken fluency in Spanish. Conversant in Mandarin Chinese.
- **International experience:** Worked in Chile, Peru, Mexico, Thailand, and Kenya. Studies for one year in Chile.

CV Guidelines

A curriculum vitae (CV) is a summary of your experiences and educational background. While it can resemble a resume, a CV is most often used when applying for a teaching or research opportunities, applying for a grant or fellowship, or for further academic training. The process will be similar to the process of writing a resume, however, CVs are frequently longer and include much more detailed information.

Include the following relevant information in your CV:

- ***Identifying Information***: Name, address, phone, and email.
- ***Education***: In reverse chronological order, list your expected degree, previously earned degrees, majors, institutions, and dates of completion.
- ***Dissertation***: Put the title and short description of your thesis.
- ***Areas of Research Interest, Specialization or Competence***: Here you will want to include any expertise or principal research and teaching interests.
- ***Experience***: This is often divided into categories such as research experience, teaching experience, industry experience, and professional experience.
- ***Fellowships, Awards, Honor***: Include date awarded and monetary amount if appropriate
- ***Memberships or Professional Affiliations***: List all positions held or memberships.
- ***Languages***: List languages where you are proficient, fluent, or have basic skills.
- ***Publications and Presentations***: Provide a full list of your authored publications and presentations.
- ***Others***: This might include works in progress, references, or dissertation abstract.

Remember to tailor your CV to the position!

Differences Between a CV and Resume

Category	Curriculum Vitae	Resume
What is it?	A full list of your professional and educational history.	A selection of your experience and skills that are most pertinent to the advertised position.
How long is it?	May be many pages; length is not important.	Usually one page only for entry-level positions. Multiple pages may be appropriate for more advanced or research-oriented positions.
When do you use it?	Used for academic positions and research positions in government and industry.	Used for every other type of job outside of academia and research science.
Do you include your publications?	A full list of publications is essential.	Even a partial list of publications is rarely included.
How important is style and layout?	Content is what matters most. As long as material is clearly presented, style doesn't matter that much.	Style and content are both important. Bad style is a liability.
Are references listed?	Typically references are listed at the end of the CV.	References are not listed on a resume. If requested, you may submit a separate list of relevant references.

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Sample CV #1

42 Jedi Temple Road,
Galactic City, Coruscant 03653

David Martin Warsinger

ChiropteraMan@mit.edu
(314) 159-2653

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA — 9/2012 – 6/2015
PhD candidate, Mechanical Engineering, Renewable Energy and Water

Cornell University, College of Engineering, Ithaca, NY
M.Eng, Mechanical Engineering, 4.08 GPA, Top of Class — 9/2010-12/2010
B.S., Mechanical & Aerospace Engineering; 3.70 Cumulative GPA, 4.04 Concentration GPA — 9/2006-5/2010

AWARDS

Ag Innovation Grand Prize ($100k, national competition, 1 Given), DOE SCGF Finalist, Bart Conta Prize in Energy and the Environment, Sustainable Energy Fellowship, Hansen Masters of Engineering Fellowship, Outstanding Achievement Award, Sibley Graduate Research Conference People's Choice Award, 1st Place Mechatronics AI Battlebot Tournament

MIT RESEARCH

Membrane Distillation (MD) Desalination with Professor Lienhard, — 9/2012-present
- Designed and constructed flexible and innovative MD apparatus with temperature, pressure, and velocity control
- Five first author papers submitted or nearing completion: Review of Fouling in MD, Superhydrophobic condensing in AGMD, Effect of Module Inclination Angle on AGMD, Entropy generation of desalination technologies using waste heat, and fouling prevention w/ air recharging. 3+ papers in progress. (see reverse)
- Seven additional 2nd or 3rd author journal papers submitted or nearing completion: multistage MD, concentration polarization in MD, MD module configuration efficiency, and metal gap MD (coauthored & won $100k grant)
- Five Patents submitted or in progress: superhydrohphobic AGMD, metal gap MD, droplet pinning, etc

CORNELL RESEARCH

Scaled Modular Test Platform for Sustainable Building Systems: Lead Researcher, Cornell — 11/2009-12/2010
- Led team of 7 graduate students in creation of a 1/10 size thermally-scaled building with energy control systems
- Simulated envelope and systems dynamic energy use and scaling factors via both equations and EnergyPlus

Finite Element Analysis Optimization Study on Gas Turbine Compressor Fir Tree Root Design — 9/2010-7/2011
- Used FEA analysis on rotor-to-blade affixing to create Fir-tree root optimization methodology of key parameters

OxyCombustion Flame Extinction for Carbon Sequestration — 1/2009-6/2009
- Simulated opposed-jet flame extinction with CHEMKIN, created analysis tool with MATLAB

P3 Research Grant: People, Prosperity, and the Planet — 2/2008-5/2009
- Constructed and tested full-scale Solar Thermal Evacuated Tubes array for extreme temperatures (>400 °F)

PATENT WORK

Invented, filed, and continuing to file patents in the fields of Desalination, Geothermal Cooling, Building Heating and Cooling, Hybrid Vehicles, and Wind Turbines
- Co-inventors and patent lawyers include Saied Tadayon, PhD, J.D., Bijan Tadayon, PhD, J.D., and others

WORK EXPERIENCE

Cofounder and CTO, Coolify, Cambridge MA — 9/2012-present
- Cofounded startup, invented technology, competed in entrepreneurship competitions, building prototype

Consulting for Startups, Cambridge MA — 9/2012-8/2013
- Thermofluids analysis, design, patenting, websites for startups EcoVent, and EcoKitty Cuisine

Graduate Mechanical Engineer at Arup, Washington D.C. — 3/2011-6/2012
- Created energy models for addition to world's largest LEED Platinum Building Complex (JCI Headquarters)
- Designed solar thermal, PV, cogeneration, geothermal, chilled beam, building envelope, and other systems
- Consulted on net-zero Ecodistrict; the 22 building, 11 million square foot US Government sustainability showcase
- Energy, HVAC system, and sustainability design for office complexes, art museums, university laboratories, hotels, performing arts centers, restaurants, spas, and embassies, including 6 LEED platinum projects

Intern at Pareto Energy, Washington D.C. — 6/2007-8/2007
- Start-up for micro-grids and energy, work included trigeneration and a $100 million solar power station in Israel

SOLAR HOUSE PROJECT

Engineering Team Leader — 9/2007-10/2009
- Coordinated 150-member team for the high-tech, sustainable, international "Solar Decathlon" competition.
- Designed and built innovative and efficient HVAC system with advanced control algorithms — 8/2006-10/2009

TEACHING & CLUBS

- TA for Thermodynamics; taught 35-student section, received highest rating among TAs (4.63/5) — 8/2011-12/2011
- President of Cornell Chess Club; tutored, ran tournaments, drew against Grand Master Palatnik — 9/2008-5/2009
- Volunteer after-school Science Teacher at underprivileged Beverly J. Martin Elementary School — 9/2007-12/2007
- Paid freelance Tutor for math, physics, and chemistry for grades 6 through college sophomores — 8/2003-present

RELEVANT SKILLS

- Software: Programming, Thermofluids, Design, Statistics, Chemistry: EES, MATLAB, Java, eQUEST, Trace 700, FLUENT, Solid Works, ANSYS, CAD, Revit, Adobe Illustrator, Excel modeling, Minitab, CHEMKIN, etc
- Machining and Analysis: lathe, mill, soldering, sheet metal, circuit work, sculpting, piping, SEM, XRD

CERTIFICATES

- Secret Security Clearance- US State Department, Six Sigma Black Belt Certification

HOBBIES

- Micro Sculpting • Stock Investing • Online Chess • Weight Training • Swimming • Running • Trumpet • Games

Journal Papers, Conference Papers, and Patents: completed and ongoing

1st Author

[1] D. M. Warsinger, K. H. Mistry, H.-W. Chung, K. Nayar, and J. H. Lienhard V, "Entropy generation of desalination powered by variable temperature waste heat," *Manuscript, Submission to Desalination in Progress*.
[2] D. M. Warsinger, S. M. Van Belleghem, J. V. Gonzalez, J. Swaminathan, and J. H. Lienhard V, "The effect of air layers and membrane superhydrophobicity on fouling in membrane distillation," in *Proceedings of The American Water Works Association Annual Conference and Expoisition, Anaheim, CA, USA*, 2015.
[3] D. M. Warsinger, J. Swaminathan, S. M. Van Belleghem, J. V. Gonzalez, and J. H. Lienhard V, "Reduction of fouling in membrane distillation by a novel method of superhydrophobicity and maintaining air layers," 2015.
[4] D. M. Warsinger, "Can a convective sail explain sauropod heat tolerance and long tails?," *Manuscript*.
[5] D. M. Warsinger, J. Swaminathan, P. Chatterjee, and J. H. Lienhard V, "Experimental and theoretical study of concentration and temperature polarization in flat plate versus hollow fiber membrane distillation," *Paper in Progress*.
[6] D. M. Warsinger, J. Swaminathan, and J. H. Lienhard V, "Superhydrophobic air-layer recharging for fouling reduction in membrane distillation," *Provisional Patent Application, In Progress*, 2015.
[7] D. Warsinger, J. Swaminathan, and J. H. Lienhard V, "Removal of pinning and flooding in superhydrophobic condensing," *Provisional Patent Application, In Progress*, 2015.
[8] D. M. Warsinger, J. Swaminathan, and J. H. Lienhard V, "A nucleation and saturation index based fouling regime map for membrane distillation," *Paper in Progress*.
[9] D. M. Warsinger, J. Swaminathan, E. Guillen-Burrieza, H. A. Arafat, and J. H. L. V, "Scaling and fouling in membrane distillation for desalination applications: A review," *Desalination*, 2014.
[10] D. Warsinger, J. Swaminathan, L. Maswadeh, and J. H. Lienhard V, "Superhydrophobic condenser surfaces for air gap membrane distillation," *planned submission to Desalination*, Nov. 2014.
[11] D. Warsinger, J. Swaminathan, and J. H. Lienhard V, "Hydrophobic air-gap membrane distillation," *Full Patent Application, US Application No. 14/517,342*, October 2014.
[12] D. E. M. Warsinger, J. Swaminathan, and J. H. Lienhard V, "Effect of module inclination angle on air gap membrane distillation," in *Proceedings of the 15th International Heat Transfer Conference, IHTC-15, Paper No. IHTC15-9351,* Kyoto, Japan August 2014.
[13] D. Warsinger, D. Patel, Y. Kelman, S. R. Lancaseter, J. Spada, and N. Johnson, "Method of and system for automatically adjusting airflow, app. no. 61902939," *Provisional Patent Application, US Application No. 61902939*, November 2013.
[14] D. Warsinger (Martin), B. Tadayon, and S. Tadayon, "Method and system for rotary coupling and planetary gear," *Full Patent Application, US20130267375 A1*, March 2010.
[15] D. Warsinger (Martin), B. Tadayon, and S. Tadayon, "Heat exchange using underground water system," *Full Patent Application, US20120255706 A1*, March 2012.
[16] D. Warsinger (Martin), "Hybrid vehicle optimization and control incorporating unconventional additional data," *Provisional Patent Application*, March 2012.
[17] D. Warsinger (Martin), B. Tadayon, and S. Tadayon, "Wind turbine blade system with air passageway," *Full Patent (Granted), US8449255 B2*, March 2010.

Not 1st Author

[18] K. Nayar, J. Swaminathan, D. Warsinger, J. Swaminathan, D. Panchanathan, , and J. H. Lienhard V, "Effect of scale formation on surface tension of seawater and membrane distillation," in *Proceedings of The International Desalination Association World Congress on Desalination and Water Reuse, San Diego, CA, USA*, Aug. 2015.
[19] K. G. Nayar, J. Swaminathan, D. M. Warsinger, and J. H. Lienhard V, "Alternative technologies for low temperature thermal desalination," in *Proceedings of the 2015 Indian Water Week, New Delhi, India*, Jan. 2015.
[20] J. Swaminathan, D. M. Warsinger, and J. H. Lienhard V, "High efficiency single-stage membrane distillation configurations: Experimental investigation," in *Proceedings of The International Desalination Association World Congress on Desalination and Water Reuse, San Diego, CA, USA*, Aug. 2015.
[21] J. Swaminathan, D. Warsinger, H. W. Chung, R. McGovern, and J. H. Lienhard V, "Multi-effect conductive gap membrane distillation," *Provisional Patent Application*, November 2014. reference number 17498.
[22] J. Swaminathan, D. Warsinger, H. W. Chung, and J. H. Lienhard V, "Metal spacer enhanced permeate gap membrane distillation for energy efficient desalination," *Provisional Patent Application*, October 2014. reference number 16943.
[23] J. Swaminathan, D. Warsinger, and J. H. Lienhard V, "Membrane distillation for high salinity feed desalination," in *Proceedings of the 11th IWA Leading Edge Conference on Water and Wastewater Technologies*, May 2014.
[24] H. W. Chung, J. Swaminathan, D. Warsinger, and J. H. Lienhard V, "Design study of multistage vacuum membrane distillation (MSVMD) system for high salinity application," *Desalination*, 2015.
[25] E. M. Fisher, O. Park, and (Acknowledging D. Martin), "Oxycombustion oxidizer effects on the extinction strain rates for methane opposed-jet diffusion flames," in *Proceedings of The 6th U.S. National Combustion Meeting, Ann Arbor, MI*, May 2009.

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Sample CV #2

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Education

Massachusetts Institute of Technology — Cambridge, MA
Ph.D in Mechanical Engineering. GPA 4.9/5.0 — *Expected, June 2015*
- Provisional thesis title: Chemo-mechanics of energy storage materials: focus on Li-ion battery electrodes. Advisor: Lallit Anand.
- Minor in micro and nano scale material science.

Massachusetts Institute of Technology — Cambridge, MA
M.S. in Mechanical Engineering. GPA 4.9/5.0 — *June 2012*
- Thesis title: A coupled theory for diffusion of hydrogen and large elastic-plastic deformations of metals. Advisor: Lallit Anand.

Massachusetts Institute of Technology — Cambridge, MA
B.S. in Mechanical Engineering. GPA 4.8/5.0 — *February 2010*
- Participated in four semesters of undergraduate research under the guidance of Prof. Lallit Anand resulting in an undergraduate thesis and a joint conference publication in the ASME IMECE 2010 proceedings.
- Thesis title: Nitinol-reinforced shape-memory polymers.

Research Experience

MIT Mechanical Engineering — Cambridge, MA
Advisor: Lallit Anand

My research focuses on modeling the coupled multi-physics (deformation-diffusion) behavior of energy storage materials. My work combines rigorous thermodynamically-consistent constitutive frameworks with robust numerical implementations.

- Currently developing a coupled deformation-diffusion model for Silicon anodes. Thus far, the model has been calibrated to substrate curvature experiments and is capable of reproducing both the mechanical response as well as the electrochemical response of the experiments. Using this model I am studying the effect of deformation and plasticity on the electrochemical performance of various nano-dimensioned Silicon anodes which have been experimentally realized.
- Developed and numerically implemented a continuum level model which couples Cahn-Hilliard type diffusion with large elastic deformations to model the phase-separating behavior of Lithium when it intercalates in certain cathodes. We have shown through simulations of representative spheroidal particles that the lithiation morphology, as well the rate at which the battery can be charged, is highly dependent on the stress built-up in the particle.
- Developed a theory and numerical implementation for modeling hydrogen diffusion in metals undergoing large elastic-plastic deformations. The model was used to study hydrogen diffusion at a blunt-crack, and determine the appropriate boundary conditions for modeling the physical problem of a metal host exposed to gaseous hydrogen.

Research Interest

My broad research interests are:
- Coupled multi-physics problems
- Computational mechanics
- Energy storage materials and the role of mechanics in their performance
- Modeling of electrochemical phenomena (i.e. Li-intercalation, chemical reactions, etc.) at the continuum scale

Awards

Graduate Student Paper Award for the presentation "Coupled diffusion-deformation of phase-separating materials" bestowed by ASME and SES at the joint SES annual technical meeting and ASME-AMD annual summer meeting, July 2013.

Den Hartog Travel award in Mechanics awarded for travel to present at the ASME IMECE 2013 conference.

2011 Wunsch Foundation Silent Hoist and Crane Award — Outstanding Teaching Assistant for the class Mechanics and Materials II.

2008 AMP Inc. Award for outstanding performance in Mechanics and Materials II.

Teaching Experience

Teaching & Learning Laboratory at MIT — *Spring 2014*
Teaching Certificate Program
- Completed a teaching certificate program based on seven workshops aimed at development of teaching skills. The program included exposure to relevant research in teaching and learning, and structuring of future teaching.
- Presented two short teaching sessions which were videotaped, and from which I received feedback on my teaching performance as well as gave feedback to other participants.

Undergraduate Mechanics and Materials
Teaching assistant — *Spring 2011*
- Teaching assistant for the undergraduate Mechanics and Materials class. Topics included strain, stress, elasticity, fracture, fatigue, plasticity, and viscoelasticity.
- Prepared homework and exam problems/solutions, gave review lectures, and facilitated student laboratory experiments.
- Developed a student project based on material selection in bicycle design. The project combined direct experimentation on bicycle forks tested in an Instron machine, finite-element modeling performed in Solidworks, and analytical beam bending solutions to explore material selection and design.
- Overall rating 6.4/7.0.

Graduate Mechanics and Materials — *Spring 2010 &*
Teaching assistant — *Spring 2013*
- Teaching assistant for the graduate Mechanics Materials class. Topics included kinematics, stress, and balance principles. Linear elasticity and thermal elasticity. Viscoelasticity. Small-strain elastic-plastic deformation. Introduction to large deformations and nonlinear hyperelastic material behavior.
- Taught a weekly one hour recitation which reviewed lecture material and solved example problems. Prepared homework and exam problems/solutions.
- Overall rating 6.1/7.0.

Advising Experience

MIT Mechanical Engineering *September 2014 to Present*

- Currently advising an undergraduate student as part of a research program for undergraduates at MIT and as part of her thesis work. The research focuses on the experimental characterization of the deformation-diffusion behavior of swellable elastomers.

Industry Experience

Apple Inc. Cupertino, CA
Interning Product Design Engineer *June to August 2009*

- Interned at Apple's iPhone/iPod accessories product design team. Work involved mechanical design, CAD modeling, prototyping, reliability testing, and competitor benchmarking.
- Two issued patents: "Accessory Controller for Electronic Devices" (US 8.314.354 B2). "Compact media player" (US 8.724.339 B2).

Qualcomm MEMS Technologies San Jose, CA
Interning Engineer *June to August 2008*

- Characterized the mechanical behavior of Qualcomm's MEMS display technology.
- Performed extensive MATLAB programming to develop a graphical user interface for retrieving the optical response of a finite-element simulated pixel.

Publications (Accepted)

Chester, S.A., **Di Leo, C.V.**, and Anand, L. (2014). A finite element implementation of a coupled diffusion-deformation theory for elastomeric gels. *International Journal of Solids and Structures*, 52, 1-18.

Di Leo, C.V., Rejovitzky, E., and Anand, L. (2014). A Cahn-Hilliard-type phase-field theory for species diffusion coupled with large elastic deformations: application to phase-separating Li-ion electrode materials. *Journal of the Mechanics and Physics of Solids*, 70, 129.

Di Leo, C.V., Luk-Cyr, J., Liu, H., Loeffel, K., Al-Athel, K., and Anand, L. (2014). A new methodology for characterizing traction-separation relations for interfacial delamination of thermal barrier coatings. *Acta Materialia*, 71, 306-318.

Di Leo, C.V., and Anand, L. (2013). Hydrogen in metals: A coupled theory for species diffusion and large elastic-plastic deformations. *International Journal of Plasticity*, 43, 42-69.

Bhattacharyya, R., **Di Leo, C.V.**, Floerkemeier, C., Sarma, S., and Anand, L. (2010, November). RFID tag antenna based temperature sensing using shape memory polymer actuation. In Sensors, *2010 IEEE*, 2363-2368.

Chester, S.A., Srivastava, V., **Di Leo, C.V.**, and Anand, L. (2010, January). A large-deformation theory for thermally-actuated shape-memory polymers and its application. In *ASME 2010 IMECE*, 677-683.

(Submitted)

Di Leo, C.V., Rejovitzky, E., and Anand, L. Diffusion-deformation theory for amorphous silicon anodes: the role of plastic deformation on electrochemical performance. *Electrochimica Acta*, Submitted.

Rejovitzky, E., **Di Leo, C.V.**, and Anand, L. (2014). A theory and a simulation capability for the growth of a solid electrolyte interphase layer at an anode particle in a Li-ion battery. *Journal of the Mechanics and Physics of Solids*, Submitted.

(In Preparation)

Di Leo, C.V., and Anand, L. Split methods for solving the Cahn-Hilliard equation using finite element analysis. Application to phase-separation in elastic media.

Invited Talks

Di Leo, C.V. (November, 2014). Computational modeling of Silicon anodes: the role of mechanics on the electrochemical performance. *Mechanical and Industrial Engineering Department, New Jersey Institute of Technology.*

Conferences (Lead Author)

Di Leo, C.V., Rejovitzky, E., and Anand, L. (June, 2014). Coupled diffusion-deformations in phase-separating materials. *US National Congress of Theoretical and Applied Mechanics*, East Lansing, MI.

Di Leo, C.V., Rejovitzky, E., and Anand, L. (November, 2013). A Cahn-Hillard-type phase-field theory for species diffusion coupled with large elastic deformations. *ASME International Mechanical Engineering Congress and Exposition*, San Diego, CA.

Di Leo, C.V., Rejovitzky, E., and Anand, L. (July, 2013). Coupled diffusion-deformation of phase-separating materials. *SES Annual Technical Meeting and ASME-AMD Annual Summer Meeting*, Providence, RI

Di Leo, C.V., and Anand, L. (November, 2012). Hydrogen in metals: A coupled theory for diffusion and large elastic-plastic deformations. *ASME International Mechanical Engineering Congress and Exposition*, Houston, TX.

(Contributing Author)

Chester, S.A., **Di Leo, C.V.**, and Anand, L. (November, 2011). A thermo-chemo-mechanically coupled theory for thermally-responsive elastomeric gels. *ASME International Mechanical Engineering Congress and Exposition*, Denver, CO.

Chester, S.A., Srivastava, V., **Di Leo, C.V.**, and Anand, L. (January, 2010). A large-deformation theory for thermally-actuated shape-memory polymers and its application. *ASME International Mechanical Engineering Congress and Exposition*, Vancouver, BC Canada.

Patents

Prest, C.D., and **Di Leo, C.V.** (2014). "Compact media player." U.S. Patent No. 8,724,339.
Prest, C.D., **Di Leo, C.V.**, and Minoo, J. (2012). "Accessory controller for electronic devices." U.S. Patent No. 8,314,354.

Skills

Language: Fluent in Spanish, Portuguese, German and English
Computer: Fortran, Abaqus (including UMAT and UEL), MATLAB, Solidworks, NX, Mastercam Lathe and Mill.

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EAPS POSTDOC

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EDUCATION

MIT & Woods Hole Oceanographic Institution, Ph.D. Geochemistry 2010
University of Leeds, U.K., M.Sc. Geochemistry 2004
Bangor University, U.K., B.Sc. Geological Oceanography 2002

ACADEMIC EXPERIENCE

Dept. of Earth, Atmospheric and Planetary Sciences (EAPS) Postdoctoral Associate Since 9/2013

- Experimental investigation of the rates and mechanisms of secondary oil-to-gas cracking to develop and validate ab initio quantum kinetic models for this process under geologic conditions
- Experimental investigations of oil-to-gas decomposition, working in close collaboration with theoretical chemistry modelers in the MIT Chemical Engineering Dept. • Long Term Guest Investigator (WHOI)
- Advisors: S. Fish (EAPS) and W.H. Blue (ChemE)

Guest Investigator (Long Term), Woods Hole Oceanographic Institution, MA Since 9/2013

MARUM Center for Marine Environmental Sciences & Department of Geosciences 2010-2013
Univ. of Bremen, Germany Postdoctoral Fellow

- Lead investigator in sampling and analyses of seafloor hydrothermal fluids in the Mid-Atlantic Ridge and Manus Basin, and in novel organic geochemical investigations of associated hydrothermal sulfide structures. Advisors: ABC and XYZ
- Led projects and field teams sampling and analyzing seafloor geothermal fluids and solids on two international sea-going expeditions, using state of the art submersible and fluid sampling technology
- Led a multidisciplinary team investigating biomarkers in hydrothermal structures, including study publication

MIT/WHOI Joint Program in Chemical Oceanography 2005-2010
RESEARCH ASSISTANT, Dept. of Marine Chemistry and Geochemistry

- Developed methods for and analyzed dissolved organic and inorganic gases, including trace species
- Experimentally investigated abundances and isotope compositions of trace organics in geothermal fluids
- Collaborated with interdisciplinary scientist to conduct thermodynamic modeling of dissolved gases in experimental and field samples
- Teaching assistant for MIT graduate course Aquatic Chemistry
- Thesis: Laboratory and Field-based Investigations of Subsurface Geochemical Processes in Seafloor Hydrothermal Systems
- Combined thermodynamics, trace organic analyses, and high temperature experiments to constrain organic geochemical processes in submarine hot springs
- Thesis Advisor: Canu Seaweed. Cumulative GPA: 5.0/5.0

Guest Student, Woods Hole Oceanographic Institution, MA 08/2003

TEACHING EXPERIENCE

- Jacobs (International) University Bremen, 2012. Lecturer for senior B.Sc. course 'Geochemistry of Aqueous Systems' with Prof. A. Developed and taught lectures, problem sets, exam questions.

- University of Bremen, 2011. Guest lecturer for 'Petrology of the Ocean Crust' M.Sc. course with Prof. B. Developed and taught lectures, exam questions. Class size 75 and held office hours every Monday.

GRADUATE & UNDERGRADUATE RESEARCH MENTORING

- University of Bremen, 2012. Developed, supervised M.Sc. thesis of N. G. (coauthor on Environ. Microbiol Manuscript). A conference abstract is published, additional manuscript is in prep.

- University of Bremen, 2011. Mentored Bridgewater State College undergraduate and WHOI guest student (currently graduate student at the Dept. of Earth Sciences, U.Minn.) in hydrothermal fluid analysis during his participation in expedition SO-216 (Manus Basin) as my research assistant

PEER-REVIEWED PUBLICATIONS

EAPS Postdoc., M. Y†, P. P†, N. G§, J.P., A.M., R. A, W. B, K., Microbial lipids reveal diverse carbon flow patterns on hydrothermal sulfide structures. In press, Environmental Microbiology. († equal contribution, § mentored M.Sc. student)

EAPS Postdoc, J.M. Mc. and C Seaweed **(2014)** The origin of methanethiol in mid-ocean ridge hydrothermal fluids. Proc. Natl. Acad. Sci. USA. 111(15), pp5474–5479.)

LG, S.Q., Blue, G.L., D.S., M.D., and **EAPS Postdoc (2012)** Online Letter: H2/CH4 ratios cannot reliably distinguish abiotic vs. biotic methane in natural hydrothermal systems. Proc. Natl. Acad. Sci. USA 109(47), E3210.

N.J., **EAPS Postdoc.**, M.E., DK., Seaweed, J.S., W.E. Jr. **(2012)** Subseafloor phase equilibria in high-temperature hydrothermal fluids of the Lucky Strike Seamount (Mid-Atlantic Ridge, 37°17'N). Geochim. Cosmochim. Acta 90, pp303–322.

EAPS Postdoc, Seaweed, J.S, **(2012)** Hydrogen isotope exchange between n-alkanes and water under hydrothermal conditions. Geochim. Cosmochim. Acta 77, pp582–599.

EAPS Postdoc, Seaweed, J. S., P.B., W. P. R., W. C., S. P., E., and R., M. **(2011)** Geochemistry of hydrothermal fluids from the PACMANUS, Northeast Pual and Vienna Woods hydrothermal fields, Manus Basin, Papua New Guinea. Geochim. Cosmochim. Acta 75, pp1088–1123.

M. J., Seaweed, J. S., C. G., M. K., P. J., G., T. M., **EAPS Postdoc**, C. F., L. H. T. **(2011)** Chemistry of hot springs along the Eastern Lau Spreading Center. Geochim. Cosmochim. Acta 75, pp1013–1038.

R. J., **EAPS Postdoc**, K.N., P. B., S. H., and J. G. **(2011)** Low marine sulfate concentrations and the isolation of the European epicontinental sea during the Early Jurassic. Geol. 39, pp7–10.

P. R., Seaweed J. S., O. J., **EAPS Postdoc**, and, M. K. **(2010)** Rare earth element abundances in hydrothermal fluids from the Manus Basin, Papua New Guinea: Indicators of sub-seafloor hydrothermal processes in back-arc basins. Geochim. Cosmochim. Acta 74, pp5494–5513.

Widall, P. B., Hall, A., New, J. G., **EAPS Postdoc**, Matt, E., and Crow, S. **(2006)** An eastern Tethyan (Tibetan) record of the Early Jurassic (Toarcian) mass extinction event. Geobiology 4, pp179–190.

Manuscripts in review:
‡ Seaweed, J.S., **EAPS Postdoc**, W. P., P.C., W.C., S.T., M. E., Submarine venting of magmatic volatiles in the Eastern Manus Basin, Papua New Guinea.
In revision, Geochim. Cosmochim. Acta.

C. M., R.M., **EAPS Postdoc**, A. T. Arsenic in fluids and biota of the Menez Gwen hydrothermal system. In review, Deep-Sea Research Pt.I.

SELECTED CONFERENCE PRESENTATIONS (PUBLISHED ABSTRACTS, ‡ attached)

‡ G. N.§, M.Y., **EAPS Postdoc**, P. W., K.U. **(2013)** Microbial lipid remnants in hydrothermal structure interiors: Evidence for transport from subseafloor environments. Organic Geochemistry: Trends for the 21st Century, 1, B106 (abstract). 26th International Meeting on Organic Geochemistry (IMOG) 2013, Tenerife. (§ mentored M.Sc. student, manuscript in prep.)

‡ **EAPS Postdoc**, X. M., M. J., Seaweed, K.U., and W.B. **(2011)** Phase separation, degassing and anomalous methane at the Menez Gwen hydrothermal field. Mineralogical Magazine, 75(3), p1702 (abstract). 21st Annual V.M. Goldschmidt Conference, Prague.

Seaweed , J. S., Bach, W., **EAPS Postdoc (2010)** Fluid-mineral equilibria in subseafloor reaction zones beneath Eastern Manus vent fields. Geochim. Cosmochim. Acta, 74(12, Suppl. 1), pp A930 (abstract). 20th Annual V.M. Goldschmidt Conference, Knoxville, TN.

S. W.C., One, S., Seaweed, J., **EAPS Postdoc**, Titey, M., Braddock, P. **(2010)** Stable isotope studies of Manus basin hydrothermal vent fluids and deposits. Geochim. Cosmochim. Acta., 74(12, Suppl. 1), pp A940 (abstract). 20th Annual V.M. Goldschmidt Conference, Knoxville, TN.

EAPS Postdoc and J. Seaweed **(2009)** INVITED: Methanethiol: A geochemical link between carbon and sulfur in hydrothermal systems? Geochimica et Cosmochimica Acta, 73(13, Suppl. 1), pp A1079 (abstract). 19th Annual V.M. Goldschmidt Conference, Davos, Switzerland.

Seaweed, J. and **EAPS Postdoc (2009)** INVITED: Chemical equilibria involving aqueous carbon compounds in submarine hydrothermal systems. Geochimica et Cosmochimica Acta, 73(13, Suppl. 1), pp A1190 (abstract). 19th Annual V.M. Goldschmidt Conference, Davos, Switzerland.

New, R.J., Kathy, N., **EAPS Postdoc**, Wind, P.B., Botte, S. **(2008)** The marine sulfate-oxygen isotope record of the early Toarcian anoxic event. Geochimica et Cosmochimica Acta, 72(12, Suppl. 1), pp A679 (abstract). 18th Annual V.M. Goldschmidt Conference, Vancouver, Canada.

EAPS Postdoc, J. Seaweed, S. Sylvester **(2007)** Rapid hydrogen isotopic exchange between aqueous hydrocarbons and water under hydrothermal conditions. Geochimica et Cosmochimica Acta, 71(15, Suppl. 1), pp A825 (abstract). 17th Annual V.M. Goldschmidt Conference, Cologne, Germany.

AWARDS & ACHIEVEMENTS

2012 'Top 25' most downloaded Geochimica et Cosmochimica Acta articles in 2011, Reeves et al.(2011) and Mottl et al.(2011). Link
2011 Interridge Postdoctoral Fellowship Award (research grant)
2010 WHOI Ruth and Paul Fye Award for Excellence in Oceanographic Research, Graduate Student Best Paper Award, awarded for: Reeves et al. (2011) Geochim. Cosmochim. Acta, 75, pp1088–1123.
2010 The Sherwood Chang/Eliot Kalmbach Award for Student Poster Presentation, 2010 Gordon Research Conference on the Origin of Life (Galveston, TX).
2007 WHOI Deep Ocean Exploration Institute Fellowship
2005 WHOI Graduate Research Assistantship
2003 University Of Leeds Full Fees Bursary for UK/EU Mastership postgraduates
2001 Darbyshire Prize Award, School of Ocean Sciences, University of Wales, Bangor
1999 Aughinish Alumina Ltd. (Ireland) Educational Award for University undergraduate education

FIELD EXPEDITIONS

2013 St Ocean Institute R/V Falk/HROV Nereus Return to Mid-Cayman Rise hydrothermal systems. Guest investigator. Hydrothermal plume sampling and analysis.
2012 U.S. R/V Atlantis/ROV Jason hydrothermal exploration and sampling of the Mid-Cayman Rise. Guest investigator. Hydrothermal fluid analysis.
2011 Germ F/S Son/ROV Quest 4000m return to Manus Basin hydrothermal systems. Lead investigator in Isobaric Gas-Tight (IGT) hydrothermal fluid sampling and analysis.
2010 Germ F/S Met/ROV Quest 4000m, Menez Gwen hydrothermal system, Mid-Atlantic Ridge. Lead investigator in IGT hydrothermal fluid sampling and analysis.
2008 U.S. R/V Atlantis/DSV Alvin Guaymas Basin & East Pacific Rise hydrothermal systems
2008 U.S. R/V Roger Revelle/ROV Jason II Mid-Atlantic Ridge hydrothermal systems.
2006 U.S. R/V Melville/ROV Jason/ABE Manus Basin hydrothermal exploration, sampling.
2005 U.S. R/V Melville/ROV Jason Lau Basin hydrothermal exploration, sampling.

REVIEWER ACTIVITIES

National Science Foundation (OCE), Geochimica et Cosmochimica Acta, Earth and Planetary Science Letters, Applied Geochemistry, Geochemical Transactions, Geochemical Journal, IEEE Journal of Oceanic Engineering

SYNERGISTIC ACTIVITIES

2013 Fall AGU Session Chair 'Carbon transformations in hydrothermal systems' (oral & poster), Outstanding Student Paper Award (OSPA) judge
2006–2009 WHOI Institution Safety Committee, graduate student representative
2007–2008 MIT/WHOI Joint Program student life representative
2000–2002 Bangor University School of Ocean Sciences student representative

ACADEMIC REFERENCES

Dr. Jeff S. Seaweed, Senior Scientist (Ph.D. advisor)
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Cover Letters

You will have to write a number of letters to employers while looking for a job. One type of letter is the cover letter, which you send with your resume when you are requesting a job interview. Other letters are those you write following up interviews, arranging company site visits, and accepting or rejecting job offers. See the examples on the next pages. Here are some tips:

- State clearly in your opening sentence the purpose for the letter. Then use the rest of the letter to support your candidacy.
- Be sure that each cover letter is specifically tailored to the company to which you are writing. Research the company to help you determine your approach. Check the company's website and other resources on the Internet.
- If you are seeking a position in a field or industry that does not have an obvious parallel or connection to your academic training, for example, you are an electrical engineer who wants to use his/her quantitative skills in a finance or consulting position — be explicit about why you are interested in that particular field, organization or job, and what value you bring. Do not leave the reader wondering, "Why is an electrical engineer writing to me, the personnel manager of McKinsey?"
- If you are applying for a summer job and do not yet have any experience that is directly related to the position, focus on telling the employer what experience you do have that may be of interest.
- Always try to write to a specific individual and include their job title. Do not address your letter to "Dear Sir or Madam."
- Ask someone else to check your grammar, spelling, and style. When proofreading your own writing, it is easy to overlook silly mistakes.

Suggested Formula for Cover Letter

77 Massachusetts Ave.
Cambridge, MA 02139

September 1, 2013

Mr. John Doe
College Relations Coordinator
Technology Corporation, Inc.
11 Beacon St., Suite 7
Boston, MA 02134

Dear Mr. Doe:

First Paragraph: Introduce yourself by stating your degree program and the year in which you will graduate. Specify the type of position you are seeking (e.g., summer internship, full-time position). Tell why you are writing, and name the position, field, or general vocational area in which you are interested. Tell how you heard of the opening or organization (e.g., the job posting on MIT's CareerBridge, the career section of the company's website, or through a faculty recommendation).

Second Paragraph: Mention one or two qualifications you think would be of greatest interest to the employer. Illustrate these qualifications by describing experiences where you demonstrated these skills. Tell why you are particularly interested in the company, type of work, or location. If you have related experience or specialized training, point it out.

Third Paragraph: Close by stating your desire for an interview. You may say that you will call in a week or so to request an appointment. Make sure that your closing is not vague, but makes a specific action from the reader likely.

Sincerely,

Jane Doe

Student Enviro Eng
Environment St.
Cambridge, MA 02139

March 20, 2013

Joan Dough
77 Massachusetts Avenue
Cambridge, MA 02139

Dear Ms. Dough

I am a 2013 degree candidate for a Master of Engineering in Environmental Engineering from Massachusetts Institute of Technology. In addition, I received my Bachelor of Science in Civil and Environmental Engineering from Cornell University in 2009. Before pursuing my graduate studies, I worked as a consultant at Camp Dresser and McKee for three years applying my skills to a range of projects including sustainable technology assessments and management of multi-disciplinary, multi-consultant project teams. Based on my work and educational experience, and perhaps more importantly because of my interest and enthusiasm, I think I am well suited to pursue a career in sustainability consulting.

I have a keen interest in the field of global warming and greenhouse gas management. I am currently pursuing this interest through my thesis work: a carbon impact evaluation of proposed hydropower in Chilean Patagonia. During my time as a consultant, I was able to distinguish myself as a proficient and motivated employee. In particular I sought to engage in projects that focused on renewable energy, sustainable design, and energy efficiency. I was also involved in promoting sustainable practices within the company, and initiated an educational conference for public sector clients.

My experience includes: delivering a sustainable technology assessment to compliment a campus' low-carbon design strategy; evaluating the conversion of waste oils to biofuels at a local wastewater treatment plant; and conducting a cost analysis and carbon inventory for the design of a deep heat geothermal energy facility. Therefore, I am highly confident that I can use my skills, knowledge, and enthusiasm to help businesses develop and implement sustainability initiatives.

I welcome the opportunity to speak with you further about potential career opportunities. I can be reached at (617) XXX-XXXX or EnviroEng@mit.edu.

Sincerely,

Student Enviro Eng

Jane Doe
XXX Memorial Drive
Cambridge, MA 02139
janedoe@mit.edu
(617) XXX-XXXX

Recruiter's Name
Campus Recruiter
Company Name
Company Address
Boston, MA 02116

June 24, 2013

Dear Campus Recruiter:

I am a senior at MIT majoring in biology with a concentration in management from Sloan Business School. I was extremely impressed with Deloitte's approach to consulting after speaking with Yelena Shklovskaya. Deloitte is unique in having the ability to form diverse teams to tackle all the problems a client may have. As a member of the Strategy & Operations group, I may have the opportunity to meet and work with a variety of people in this consulting group, in other areas of consulting, and outside of consulting as well. In particular, I like the amount of attention and dedication that Deloitte puts into working with its clients, not only by devising effective strategies to address the clients' problems, but also by often implementing the recommendations on-site. Therefore, I am writing to request an invitation to interview for a Business Analyst position with Deloitte.

In the past two years, I have been involved in strategy consulting, pharmaceuticals, and government affairs for a non-profit healthcare organization. This summer, I worked in strategy consulting for Putnam Associates. My 6-member team evaluated the marketing efforts for a major pharmaceutical company's organ transplant drug. Through my management of recruitment and interviews with 98 physicians, I obtained primary research and analyzed it on national and regional levels to recommend and help implement improvements in the client's marketing plan. I learned how to work in a deadline-oriented environment, held responsibility for large segments of a team project, and enhanced my quantitative skills through analysis of primary and secondary research data. In addition, I conducted independent research to form recommendations when launching a drug that follows a related product, and I presented these key considerations to all Putnam employees.

I have been a volunteer in public policy for 7 years with the March of Dimes Birth Defects Foundation. I lobbied Senators at both the Massachusetts and California State Capitols, as well as on Capitol Hill in Washington, D.C. Lobbying has taught me negotiation skills, the need for contingency plans, and the ability to make quick yet innovative decisions. Two years ago, I was appointed Director of Massachusetts Youth Public Affairs and asked to be a member of the state's Public Affairs Council. My responsibilities include developing, organizing, and implementing the Foundation's annual public policy objectives in an ultimately results-driven environment.

Through my experience with Putnam Associates and the March of Dimes, along with my modeling work in the MIT Sloan Business School, I used my management skills to negotiate and consult with others, analytically design a successful plan, and execute my ideas. I am confident that I can bring my strong, diverse technical and business background to best fit the current needs and future ventures of Deloitte.

I welcome the opportunity to speak with you about my qualifications and ways that I can contribute to Deloitte. Thank you and I look forward to hearing from you soon.

Sincerely,

Jane Doe

Jane Doe

School Address:
105 MIT Avenue
Cambridge, MA 02139

BIOLOGY STUDENT
bio@mit.edu
(XXX) XXX-XXXX

Address:
47 A Street
Suburb, MA 0XXXX

January 21, 2013

Merck Future Talent Program Coordinator
Merck Corporate Headquarters
1 Merck Drive
P.O. Box 100
Whitehouse Station, NJ 08889-0100

Dear Merck Future Talent Program Coordinator,

I am a junior at MIT pursuing a Bachelor of Science degree in biology and a minor in chemistry. I am writing to express interest in the Merck Future Talent Program for interns in biology. I am well-qualified to conduct research and I am interested in exploring the pharmaceutical industry to expose myself to possible future careers. I heard about Merck at a campus recruiting event and was extremely impressed with Merck's approach to global healthcare. As a biology major at MIT, I have great background knowledge of biology and chemistry in addition to extensive research experience. I am eager to expand and broaden my knowledge of research, biology, and pharmaceutical development though participating in Merck's internship program. Based on my research and educational experience, and possibly more importantly because of my interest and enthusiasm, I believe I am a strong candidate for an internship at Merck.

After over a year and a half of working at the Vander Heiden Laboratory at the Koch Institute for Integrative Cancer Research, I've gained skills in research, teamwork, and problem solving all while learning how to take initiative. As a part of my lab, I collaborate closely with graduate students, technicians, and Professor Vander Heiden to discuss project directions and goals. By writing research proposals and presenting a project in a lab meeting I have learned to effectively communicate at a scientific level. Also, I am experienced in a variety of laboratory techniques. One particularly challenging project I worked on independently was expressing pyruvate-phosphate dikinase (PPDK), an uncommon and non-commercially available enzyme found in corn, from corn cDNA. To clone PPDK, I designed over 30 cloning and sequencing primers for a variety of published PPDK sequences and cyclophilin as a positive control. This project was challenging due to the fact that the corn cDNA did not contain most of the published PPDK sequences. By applying different cloning techniques, I was able to successfully clone and express PPDK.

I am passionate about research, have an extensive knowledge of biology, and have excellent communication, teamwork, and organizational skills. Most importantly, I am extremely excited about Merck and the pharmaceutical industry. Please contact me at (XXX) XXX-XXXX or bio@mit.edu. Thank you for your consideration and I look forward to hearing from you.

Sincerely,
Biology Student

7 Consultant Avenue
Cambridge, MA 02139
(617) XXX-XXXX
tppstudent@mit.edu

Navigant Consulting
125 High Street
Boston, MA 02110

Dear Navigant Hiring Committee:

I am a second year master's student in MIT's Technology and Policy Program (TPP) writing to apply for a consulting position in Navigant's Emerging Technology & Business Strategy group. After speaking with John Smith at the MIT career fair, I realized that Navigant's values of excellence, continuous development, entrepreneurial spirit, and integrity align with the principles that guide me every day and that have driven me throughout my career. Moreover, I believe that my knowledge of the energy sector, passion for data analysis, polished communication skills, and four years of consulting experience will enable me to deliver superior value for Navigant's clients.

As a graduate student in MIT's Technology and Policy Program, I spend every day at the cutting edge of the energy sector. In my capacity as an MIT Energy Initiative research assistant, I use statistical analysis to investigate trends in public acceptance and regulation related to emerging energy technologies. Graduate classes in data science, energy economics, energy ventures and strategy, and technology policy have prepared me to help Navigant offer the expert services that set it apart from competitors. Furthermore, I will bring Navigant the same leadership skills that I used as the student leader for the MIT Energy Conference's Technology Commercialization roundtable and as the mentorship manager for the MIT Clean Energy Prize.

Even before MIT, my four years of work experience in consulting—first at LMN Research Group and then at XYZ Consulting—allowed me to develop the skillset that Navigant looks for in candidates. As a science writer and policy analyst at LMN Research Group, I developed superb technical writing and visual communication skills, as well as an ability to communicate and collaborate with clients at federal agencies such as EPA and DOE. As a research analyst at XYZ Consulting, I developed an in-depth understanding of data analysis, program evaluation, and policy design.

I take pride in my skills and experience in several domains: critical thinking and analysis, communication, and leadership. I note that Navigant values these same ideals, and I very much hope to use my abilities in service of the firm and its clients. I look forward to speaking with you when you visit the MIT campus on October 10th.

Sincerely,

TPP Student

February 18, 2015

Raytheon Company
Integrated Defense Systems
50 Apple Hill Drive
Tewksbury, MA 01876

Dear Hiring Manager,

I am a recent graduate of MIT with a Bachelor of Science degree in Mechanical Engineering with a concentration in Engineering Management. I recently spoke with a Raytheon recruiter at MIT's xFair in February to discuss potential mechanical engineering related opportunities. I admire Raytheon's commitment to defense and security through the use of innovative technologies. With the combination of my engineering and management educational experiences, in addition to my work experience, I believe that I would make a great fit for the Systems Engineer position.

During my internship with Airbus working with fluid mechanic technology I evaluated wind tunnel and flight test data in order to reduce external airframe noise emissions. The analysis that I conducted involved examining data under varying flight conditions and extracting useful information. At the conclusion of my internship, I was able to provide my group with recommendations for improving the model scale testing in the wind tunnel to make better predictions for the flight test outcomes. My work was part of the group's task to provide continual improvements to the company's commercial aircraft. I would be excited to use my analytical skills to improve hardware systems, especially early in their life-cycle at Raytheon, when recommendations can have a high impact and positive result for the end user.

In addition to work experience, I have also practiced systems engineering in my coursework. Through my Optimization Methods in Management Science course I collaborated on a group project to optimize the constraints of a utility company in order to make residential demand response for the utility company a cost-effective tool. I specifically helped evaluate how transmission and distribution costs would incur through the implementation of a demand response program. This position helped me improve my communication and teamwork skills while delivering a project in a timely manner.

I am very excited about the work that Raytheon and welcome the opportunity to speak with you further about career opportunities at Raytheon and how I can contribute. Thank you for your time and consideration.

Sincerely,

MechE Student

Sample Faculty Cover Letter

Your Name
000 Memorial Drive, # 0000
Cambridge, MA 02139

August 25, 2013

Professor XXXX
Search Committee, IT 989
Department of Mechanical Engineering
University of XXX
Address
City, State Zip

Dear Professor XXXX:

I am responding to your advertisement for a faculty position in the Department of Mechanical Engineering at University of XXX. I graduated from the Department of Aeronautics and Astronautics at MIT in June with a doctorate, and am currently working as a Postdoctoral Associate at MIT in the Department of Aeronautics and Astronautics. My thesis work is in the area of active structural acoustic control using smart structures technology, and my specific research topic is the development of a new wavenumber domain sensing method for active structural acoustic control. My thesis advisor is Professor X in the Department of Aeronautics and Astronautics at MIT.

For my Ph.D. dissertation, I have worked on the development of the structural-acoustic control algorithms and their implementation for the reduction of radiated noise from vibrating underwater vehicles. The Office of Naval Research, with an objective of developing "smart" underwater vehicle systems so that the enemy cannot detect their attack in advance, has funded this project. My responsibility in this project is to develop the new technology to reduce the radiated noise from vibrating underwater vehicles. In order to accomplish this, I have developed a new wavenumber domain sensing method and applied it to the real-time estimation of acoustic power and the design of feedback controller for active structural acoustic control of the general complex structures. Furthermore, I have designed and experimentally implemented local and global controller architectures with different configurations to find the best controller configuration for the new underwater vehicle system.

I would like to continue my research on active structural control and active structural acoustic control for complex systems, including aerospace systems (aircrafts, helicopters) and underwater vehicles (submarines, torpedoes). I will carry out research on structure/fluid/control interaction phenomena and advanced sensor/actuator development using smart structures technologies. Also, I will extend my research to the development of advanced control design techniques for noise and vibration reduction of complex systems.

My ultimate research goal is to develop "intelligent structural systems", which will contain arrays of sensors and actuators, and embedded devices for controls and decision-making algorithms, so that those systems can coordinate large numbers of devices and adapt themselves to uncertain environmental changes in an intelligent manner. I believe my extensive research experience and specialization in structural dynamics and controls will allow me to continue my research in those areas.

I have enclosed my curriculum vitae with a list of publications, and a list of references. If you have any questions or would like to talk with me, I can be reached by phone at (617) XXX-XXXX or email at sample@mit.edu. Thank you for your consideration. I look forward to hearing from you soon.

Sincerely,

Your Name

Request for Informational Interview

Dear Ms. XXX:

Professor XXX, a faculty member in the Electrical Engineering and Computer Science department at MIT, suggested I contact you. I have been meeting with Professor XXX as a means of exploring the field of Speech Systems Technology as a potential career option.

He thought you would be a great resource to help me gain insight into the field and focus my job search efforts. I realize your time is very valuable so I am requesting to setup a brief 20-30 minute meeting at your convenience. I would enjoy a chance to ask you some questions.

I have enclosed my resume for your review. I thought it might be useful as a way of informing you of my educational background and experience. I can be reached at mitstudent@mit.edu or (xxx) xxx-xxxx, or if you prefer I would be happy to contact your office within 10 working days to follow up with this letter. Thank you in advance for your time and effort.

Sincerely,

Your Name

Requesting to Reschedule an Interview Due to an Academic Conflict

Dear Ms. Harper:

Thank you for the invitation to participate in a site visit at your Seattle headquarters. The opportunity to visit, meet staff and learn more about the opportunities at Javentus is exciting; however, the dates provided for the site visit conflict with my academic commitments. In conjunction with my professors, I have identified other dates in March that would be suitable for me to visit Javentus. Would rescheduling be possible?

Please know that I am extremely interested in the Developer position and working at Javentus. I hope another suitable date for a site visit might be able to be arranged. I look forward to hearing from you but will also be in contact by the end of the week to see if rescheduling might be possible.

Sincerely,

Your Name
Name@mit.edu
617-555-5555

Thank-You/Follow-Up Email

Dear Mr. Smith,

It was a pleasure speaking with you and Mr. Mansfield yesterday, regarding job opportunities at Supa Systems. I am very interested in the work you are doing and am extremely impressed with the advanced applications being used in your company.

As I mentioned during our conversation, my past two summer positions were related to the development and design of software programs for industrial computervision experiments. With my skills and interest in software design, I believe I could be of value to Supa Systems.

Thank you for your time. The interview was very informative. Please let me know if you need any more information about my background. I look forward to hearing from you.

Sincerely,

Your Name
Your Contact Information
(phone, address, email)

Letter Declining a Job

Dear Mr. Smith,

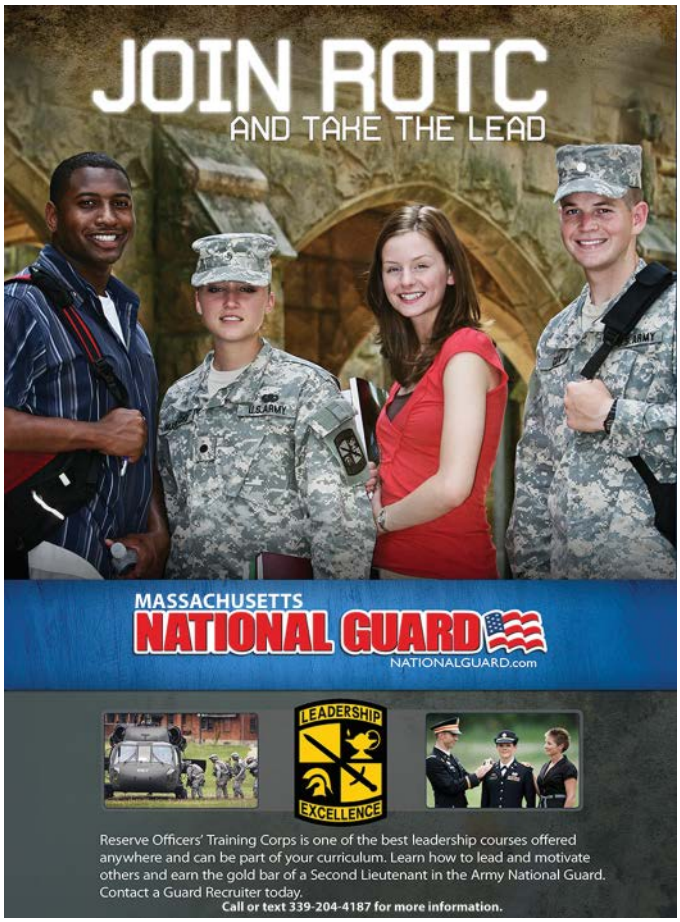
I am writing to thank you for the offer to join Northeast Electronics Laboratories as member of the research and development staff. Unfortunately, I must decline your offer. I have accepted a position with another company.

It was a difficult decision for me because I was both excited and impressed by the work at Northeast Electronics. I appreciate your giving me the opportunity to meet with you and the members of the research staff.

Again, thank you for your time.

Sincerely,

Your Name
Your Contact Information
(phone, address, email)


JOIN ROTC
AND TAKE THE LEAD
MASSACHUSETTS
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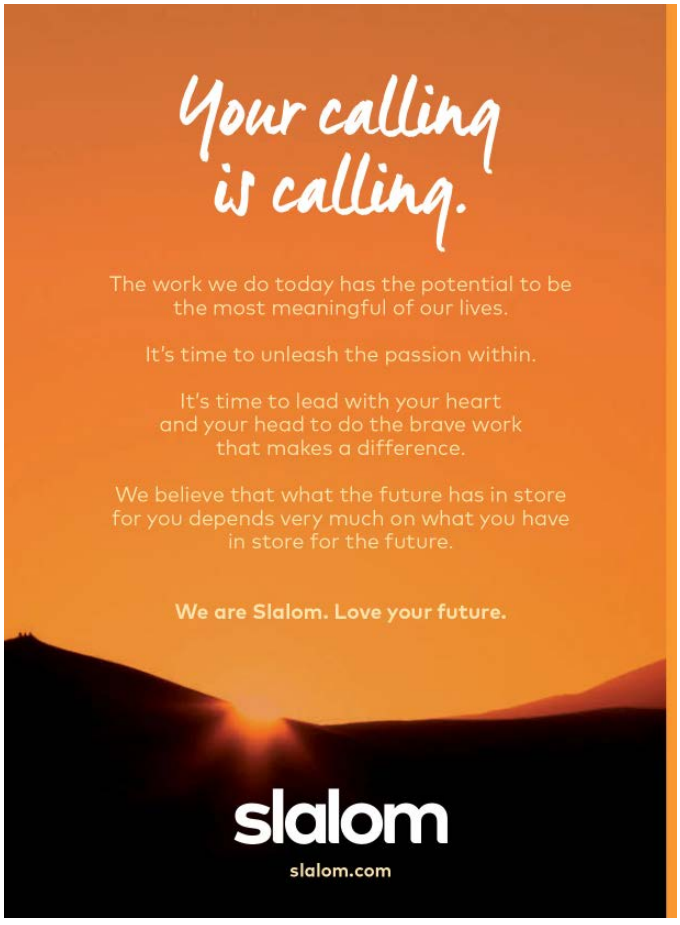
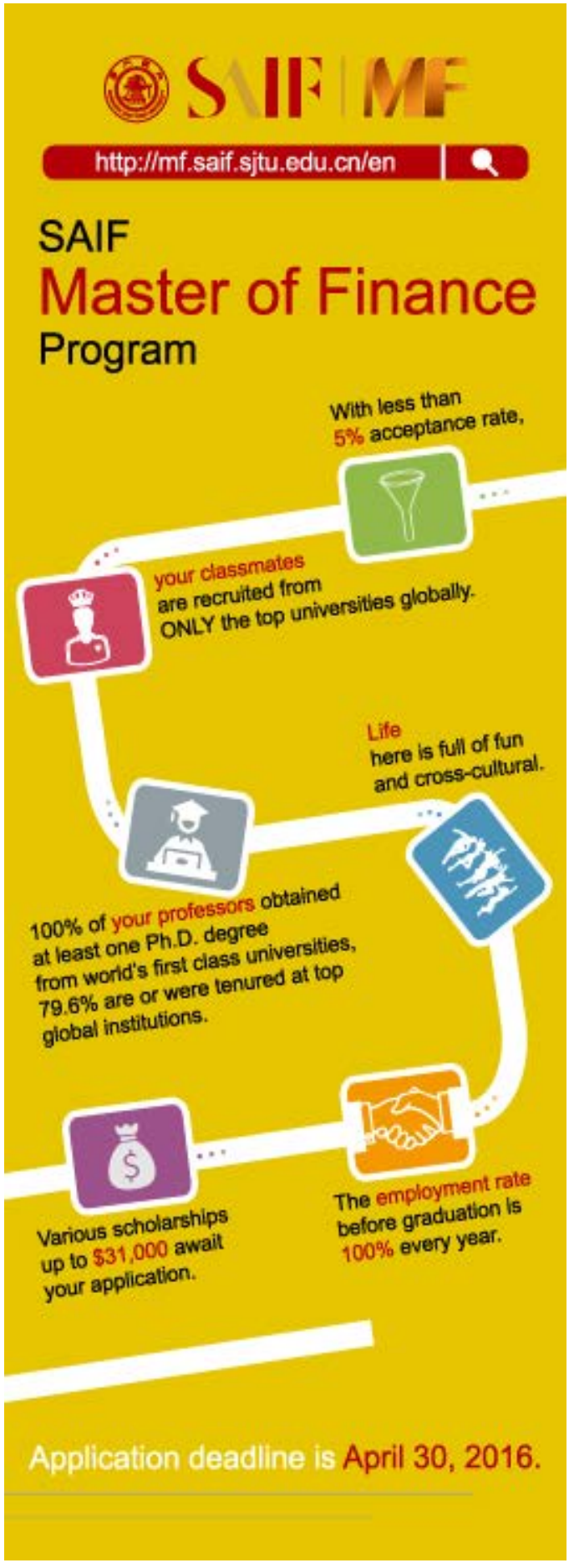
LEADERSHIP
EXCELLENCE
Reserve Officers' Training Corps is one of the best leadership courses offered anywhere and can be part of your curriculum. Learn how to lead and motivate others and earn the gold bar of a Second Lieutenant in the Army National Guard. Contact a Guard Recruiter today.
Call or text 339-204-4187 for more information.


Your calling is calling.
The work we do today has the potential to be the most meaningful of our lives.
It's time to unleash the passion within.
It's time to lead with your heart and your head to do the brave work that makes a difference.
We believe that what the future has in store for you depends very much on what you have in store for the future.
We are Slalom. Love your future.
slalom
slalom.com


SAIF | MF
http://mf.saif.sjtu.edu.cn/en
SAIF
Master of Finance
Program
With less than 5% acceptance rate,
your classmates are recruited from ONLY the top universities globally.
Life here is full of fun and cross-cultural.
100% of your professors obtained at least one Ph.D. degree from world's first class universities, 79.6% are or were tenured at top global institutions.
Various scholarships up to $31,000 await your application.
The employment rate before graduation is 100% every year.
Application deadline is April 30, 2016.

Chapter 4
Interviewing

Preparing for an Interview

Preparing for your first interview can be nerve-racking. Good preparation will help you control the nervousness and maximize your chances of a successful outcome.

One way to accomplish this is by looking at the results from surveys of employers to discover what are the top characteristics they look for in job candidates.

Take a look at the top 10 personal characteristics in "How Employers View Candidates" on page 57, start taking a personal inventory and see how you measure up in these categories. Think of one or two examples when you have proven yourself in these areas in the past and be thoughtful about how these characteristics would be valuable in the workplace environment that you are hoping to get in to.

Do thorough company research including reading annual reports, newspaper articles, and trade journals. Look at the company homepage to find out their mission statement, long-term goals, recent press releases, and to view corporate photos. Do not limit your research only to company-controlled information. Refer to Chapter 2: Researching Companies.

What Happens During the Interview?

The interview process can be intimidating if you do not know what to expect. To make it easier on you, keep in mind that most interviews fit a general pattern. The typical interview will last 30-45 minutes, although some may be longer. A typical structure is as follows:

- Five minutes: greeting and small talk
- Fifteen minutes: a mutual discussion of your background and credentials as they relate to the needs of the employer
- Five minutes: you have an opportunity to ask questions
- Five minutes: wrap-up/discuss next steps in the process

As you can see, there is not a lot of time to state your case. When you do respond to questions or ask your own, your

(continued on page 58)

Interviewing On Campus

On-Campus Interviews

On-campus interviewing continues to be a primary source of employment as reported by 35.7% of baccalaureate and 40.1% percent of master's degree recipients (see 2014 Graduating Student Survey). Networking represented the next highest method for baccalaureate degree holders and master's degree recipients.

A database of campus recruiting employers and dates are listed in CareerBridge (see page 18 for information about CareerBridge). Interviews are generally conducted at GECD in E39 on the second floor. When you arrive, sign in and wait for the employer to greet you.

Review the Policies on Campus Interviewing

Interviewing on campus is a privilege that carries certain expectations for student conduct. To clarify the standards, MIT GECD has adopted policies to serve both students and employers. Our policies cover everything from cancelling interviews to extending offer acceptance deadlines. See our Interviewing On-Campus Policies (gecd.mit.edu/jobs/find/apply/campus_interview/policies) for details, and if you have any questions or concerns, please call 617-715-5329 or stop by E39-305 to arrange an appointment with a staff member.

How Employers View Candidates

Skill/Quality	Weighted average rating*
Ability to work in a team structure	4.55
Ability to make decisions and solve problems	4.50
Ability to plan, organize and prioritize work	4.48
Ability to verbally communicate with persons inside and outside the organization	4.48
Ability to obtain and process information	4.37
Ability to analyze quantitative data	4.25
Technical knowledge related to the job	4.01
Proficiency with computer software programs	3.94
Ability to create and/or edit written reports	3.62
Ability to sell or influence others	3.54

***5-point scale, where 1 = Not important; 2= Not very important; 3= Somewhat important; 4 = Very important; 5= Extremely important.**

Source: *Job Outlook 2014, National Association of Colleges and Employers.*

(continued from page 56)

statements should be concise and organized. But do not be too brief. This could be your last chance to market yourself to the employer!

The Greeting, First Impressions and Small Talk

It is a good idea to arrive 10 to 15 minutes before your scheduled time. You can use the time to relax and organize your thoughts. The recruiter begins to evaluate you the minute you are identified and continues to evaluate you in every way. For example, he or she is analyzing the way you shake hands upon being introduced. Be firm, it shows confidence.

Here are some tips to ensure your first impression is a positive one:

- Appearance counts. Make sure you look groomed and professional. Your clothes and accessories should be neat, conservative and neutral.

- Nonverbal communication sometimes conveys a stronger message than verbal communication. According to one UCLA study, 93 percent of a person's communication effectiveness is determined by nonverbal communication. Eye contact and smiles can indicate a confident and upbeat attitude. Have a firm (but not too strong) handshake and moderate your voice to sound calm and assertive.

- At the beginning of the interview you may engage in brief small talk. This is a good opportunity to demonstrate your social and interpersonal skills as well as your excitement about the opportunity for which you are interviewing.

Strategy for Discussing Your Credentials

The main part of the interview starts when the recruiter begins discussing the organization and asking some questions regarding your past experience related to the position for which you are interviewing.

It is a good idea to think about what the recruiter is trying to find out about you when they ask certain questions. For example, if you are asked to discuss a time when you had a conflict with a colleague, keep in mind that the recruiter is looking for someone who is confident about his or her own beliefs, but open to other people's ideas as well. Most of the time, he or she is looking for collaboration and compromise. Always listen carefully to the question, ask for clarification if necessary, and make sure you answer the question completely. Give a specific example and walk through the situation, step by step. A good storytelling technique is a huge plus when interviewing because it keeps the recruiter interested. So give only the essential background information and get to the point!

Your interview preparation should include identifying examples of situations from your experiences on your resume where you have demonstrated the behaviors a given company seeks. Describe the situation, tell what you did specifically, and the positive result or outcome. Your answer should contain these four steps (Situation, Task, Action, Result or "STAR") for optimum success.

STAR Method:

Situation: Give an example of a situation you were involved in that resulted in a positive outcome. Give the interviewer enough context about the situation so that they can understand what you are about to tell them, but don't get too bogged down in details.

Task: Describe what you had to accomplish.

Action: Talk about the various actions involved in the situation's task. Mention tools and techniques and clearly identify your contributions.

Results: What results directly followed because of your actions?

Before the interview process, identify two or three of your top selling points and determine how you will convey these points (with demonstrated STAR stories) during the interview.

It is helpful to frame your answer as a story that you can tell. Typically, the interviewer will pick apart the story to try to get at the specific behavior(s). The interviewer will sometimes ask you open-ended questions to allow you to choose which examples you wish to use. When a part of your story relates to a skill or experience the interviewer wishes to explore further, he/she will then ask you very specific follow-up questions regarding your behavior. These can include "What were you thinking at that point?" or "Tell me more about your meeting with that person." or "Lead me through your decision making process."

Whenever you can, *quantify* your results. Numbers and percentages illustrate your level of contribution and responsibility. For example: "I was a shift supervisor" could be enhanced by saying " .... as Shift Supervisor, I trained and evaluated four employees."

Be prepared to provide examples of when results did not turn out as you planned. What did you do then? What did you learn? Your resume will serve as a good guide when answering these questions. Refresh your memory regarding your achievements in the past couple of years. Use examples from past internships, classes, activities, team involvements, community service, and work experience.

Example of a STAR Answer

Situation: During my internship at _____ last summer, I was responsible for managing various events.

Task: I noticed that attendance at these events had dropped by 30% over the past three years and wanted to do something to improve these numbers.

Action: I designed a new promotional packet to go out to the local community businesses. I also included a rating sheet to collect feedback on our events and organized internal round table discussions to raise awareness of the issue with our employees.

Result: We used some of the wonderful ideas we received from the community, made our internal systems more efficient and visible and raised attendance by 18% the first year.

Expect the Unexpected

During the interview, do not be surprised if you are asked some unusual questions. Many times questions are asked simply to see how you react. For example, surprise questions could range from, "Tell me a joke" to "What time period would you like to have lived in?" These are not the kind of questions for which you can prepare so do not spend time worrying about them in advance. Stay cool, think, and give an honest answer. The employer will evaluate your reaction time and the response you give, but again, there is no way to anticipate questions like these. While these questions are not always used, they are intended to force you to react under some stress and pressure.

During the interview, be prepared to deal with aspects of your background that could be construed as negative, i.e., low grade point average, no participation in outside activities, no related work experience. It is up to you to convince the recruiter that although these points appear negative, positive attributes can be found in them. A low GPA could stem from having to fully support yourself through college; you might have no related work experience, but plenty of experience that shows you to be a skilled and potentially valuable employee.

It's Your Turn to Ask Questions

When the recruiter asks, "Do you have any questions for me?" it is important to have a few ready. At this point you are able to ask strategic questions that will elicit positive responses from the employer. The questions should bring out your interest in and knowledge of the organization. Show the recruiter that you have done your homework.

Wrap Up

The interview is not over until you walk out the door. The conclusion of the interview usually lasts five minutes and is very important. During this time the recruiter is assessing your overall performance.

It is important to remain enthusiastic and courteous. Once you take the cue that the interview is over, stand up, shake the recruiter's hand, and thank him or her for considering you.

Sample Questions Asked by Employers

Personal Assessment

- Tell me about yourself.
- What are your greatest strengths and weaknesses?
- What have you done that shows initiative?
- How do you react to criticism?
- How would your best friend describe you?
- Describe your ideal job.
- Define success. Define failure.
- What can you offer us?
- Who are your role models? Why?
- What motivates you to put forth your greatest effort?
- What kind of people do you enjoy working with?
- What types of people are difficult for you to work with?
- What frustrates you?
- Are you a joiner or a loner? A leader or follower? A committee member or an executive?
- How do you spend your spare time? What are your hobbies?
- Have you ever spoken in front of a group of people?
- Tell me about a leadership role you have had. What makes a good leader?
- Where do you want to be in five years? Ten years?

Education and Experience

- Can you summarize your educational background for me?
- Why did you decide to attend school at MIT?
- What part of your education did you find the most rewarding?
- Why did you choose the major you did?
- What courses did you like the most? The least?
- Describe for me the most rewarding accomplishment since you've started college.
- Describe your study habits. How do you balance study with personal life?
- In which campus activities did you participate?
- What job-related skills have you developed?
- How do you spend college vacations?
- What extracurricular activities are you involved in? What have you gained from those experiences?
- Have you plans for furthering your education?
- If you could start college over, what would you do differently?
- Did you work while going to school? In what positions?
- Tell me about the most satisfying job you ever held. The least?
- Have you had any work experience related to this position?
- What kind of boss do you prefer?
- What kind of work interests you the most?
- Have you had any supervisory experience?
- What frustrates you on the job?
- Have you ever quit a job? Why?
- Have you ever done any volunteer work? What kind?
- How would a former supervisor describe your work?

Career Ambition and Plans

- Why did you choose this career field?
- What type of position are you looking for?
- What are your long-range and short-range goals and objectives; when and why did you establish these goals; how are you preparing to achieve them?
- What specific goals, other than those related to your occupation, have you established for yourself in the next five years?
- What qualities does a successful manager possess? ... does a successful team player possess?
- What do you know about opportunities in your field?
- What are the most important rewards you expect from your career?
- What kind of challenge are you looking for?
- What do you think determines a person's progress in a good company?
- How do you determine or evaluate success?
- What are your ideas on salary?
- How much money do you hope to earn five years from now?
- What personal characteristics are necessary for success in your field?
- Do you prefer to work on your own or under a supervisor?

Company or Organization

- Why do you want to work for this organization?
- What do you know about our organization?
- What section (service or product) are you most interested in?
- Do you prefer large or small companies? Why?
- How do you feel about working in a structured environment? A non-structured environment?
- What do you think it takes to be successful in a company such as ours?
- In what ways do you think you can make a contribution to our company?
- How long would you expect to work here?
- Are you willing to work overtime?
- Are you willing to work flextime?
- Are you willing to go where the company sends you?
- What type of work environment are you most comfortable with?
- Why do you think you might like to live in the community in which our company is located?
- Why should I hire you?
- What makes you the best person for this job?

The Close

- When could you start work?
- Is there anything else I should know about you?
- Do you have any other questions?

Behavioral Interviews and Sample Questions

Behavioral Interviewing is based on the premise that the most accurate predictor of future performance is past performance in a similar situation. It focuses on experiences, behaviors, knowledge, skills and abilities that are job related. Employers predetermine which skills are necessary for the particular job and then ask very pointed questions to determine if the candidate possesses those skills. For example, if leadership is necessary for a position, you may be asked to talk about an experience in which you were a leader as well as what you think makes a good leader.

Examples of Behavioral Questions

Behavioral questions can be difficult if you are not prepared. Always try to be conscious about what the recruiter is trying to find out about you. Setting up a mock interview with Career Services is an excellent way to practice. Here are some examples:

- Tell me about an accomplishment of which you are especially proud.
- What kind of work experience has been the most valuable to you and why?
- Tell me about a time when you had to deal with someone whose personality was different from yours.
- Give me a time where you had to carry out a directive you did not agree with.
- Describe a time when it was especially important to make a good impression on a customer/teacher/etc. How did you go about doing so?
- Describe a time when you saw a problem and took action to correct it rather than waiting for someone else to do so.
- Tell me about your most successful presentation and what made it so.
- Tell me about a meeting where you provided technical expertise. How did you ensure that everyone understood?
- Tell me about a time when there was a conflict in a job/lab/class project. How did you handle it?
- Describe a time when you took a risk that you later regretted.
- Describe a time when you took a risk and were glad you did.
- Who or what has had the greatest influence in the development of your career interest?
- What were the biggest challenges/problems you encountered in college? How did you handle them?
- Talk about a time when you had trouble getting along with a professor/co-worker/supervisor. How did you handle it?
- What was the toughest academic decision you have had to make? How did you make that decision?
- How are you conducting your job search and how will you go about making your decision?

- What is the most important lesson you have learned in or out of school?
- Describe a situation in which you were able to use persuasion to successfully convince someone to see things your way.
- Describe an instance when you had to think on your feet to extricate yourself from a difficult situation.
- Give me a specific example of a time when you used good judgment and logic in solving a problem.
- By providing examples, convince me that you can adapt to a wide variety of people, situations and environments.
- Describe an experience when you were faced with problems or stresses that tested your coping skills.
- Give me an example of a time in which you had to be relatively quick in coming to a decision.
- Tell me about a time in which you had to use your written communication skills in order to get an important point across.
- Give me an example of an important goal that you had set in the past and tell me about your success in reaching it.

Sample Questions to Ask an Interviewer

The Position:

- Would you describe the duties of the position for me, please?
- Can you tell me about the primary people with whom I would be working?
- What skills do you see as most important in order to be successful in this position?
- To whom would I be reporting?
- How and when would my performance be evaluated?
- Can you tell me about the people who would be reporting to me?

Career Paths:

- Can you tell me about the career path this position offers?
- What is the growth potential in this position? Where does this role fit in the growth strategy of the company?
- About the people who have preceded me in this position and in the department, where are they now, and what are they doing?
- Is it your usual policy to promote from within?
- How are promotions or transfers determined within the company?
- Does advancement to upper management usually require an advanced degree?

Education & Training:

- What additional training might be necessary for this position?
- Is training done in a classroom/group session or is it handled on an individual basis?
- Are there training programs available to me so that I can learn and grow professionally?
- What type of on-the-job training programs do you offer?
- Does the firm support further college education for its employees?

Assessment Questions for Interviewer:

- What kind of personal attributes and qualifications does your company value?
- What characteristics are important for this position?
- What is the most significant challenge facing your staff now?
- What have been some of the best results produced by people in this position?
- What are your projections for this department/position for the next year? (Specify type of projections, e.g., sales, production, products, profits)
- What do you see ahead for your company in the next five years?
- What are your plans for expanding the (sales, audit, research, etc.) department?

General Questions for Interviewer

- Are there any other assignments not specifically mentioned in the position description?
- Can you tell me a little about your own experience with the company?
- When do you expect to make a hiring decision for this position?
- Could you describe the hiring process?
- Is there anything that we have discussed today that would give you concern regarding my candidacy?

Telephone Interviews

Telephone Interviews have one advantage over the other types of interviews — you can have your preparation materials in front of you as the interview is taking place. Prepare for a phone interview just as you would for a regular interview. Compile a list of your strengths and weaknesses, as well as a list of answers to typical interview questions.

Prior to the Interview

- Keep your resume in clear view, on the top of your desk, or tape it to the wall near the phone, so it's at your fingertips when you need to answer questions.
- Have a "cheat sheet" of compelling story topics that highlight your accomplishments.
- Have company information summarized including specific critical points describing the employer and the company's products.
- Highlight the key attributes on the job description and your resume where there is alignment.
- Have a short list of questions about the job and the organization.
- Have a pen and paper handy for note taking.

- Consider dressing as you would if you were going to an actual interview rather than in casual clothing or your pajamas. Dressing up will allow you to feel more professional and help you exude confidence.
- Clear the room — evict the roommates and the pets. Turn off the stereo and other distractions.
- Close the door. Place a sign "Interview in progress — please do not disturb. Thanks."

Employers use telephone interviews as a time-effective way of identifying and recruiting candidates for employment. There are three basic types of telephone calls that you get from employers at this stage.

A. "Information Gathering Interviews" An employer may call in order to assess your interest in the company. This often occurs if you are referred to him or her through a personal contact, referral, or someone you met at a career fair. This kind of call should be treated as seriously as an in-depth interview. It is a good way for you, as the potential employee, to see if you are a good fit with the company and its objectives.

B. "Screening Call" Many companies use telephone calls as a screening mechanism in order to narrow the pool of applicants who will be invited for in- person interviews. These are quick and the person calling you may be someone from Human Resources. Some organizations may use video calls (Skype) rather than the telephone.

C. "In-Depth Telephone Interview" In this case, the telephone is being used as a way to minimize the expenses involved in traveling for the interviewer and/or the interviewee. Depending on the type of organization that you are interviewing with, you may be interviewed by a hiring committee, where you will be broadcast over a speakerphone. Increasingly companies are using video calls (Skype) for this type of long-distance interview.

During the Phone Interview

- Do not smoke, chew gum, eat, or drink.
- Do keep a glass of water handy, in case you need to wet your mouth.
- Smile. This may sound strange but smiling will project a positive image to the listener and will change the tone of your voice.
- Speak slowly and enunciate clearly.
- Use the person's title (Mr. or Ms.) and their last name. Only use a first name if they ask you to.
- Do not interrupt the interviewer.
- Take your time — it's perfectly acceptable to take a moment or two to collect your thoughts.
- Give succinct answers.
- Be able to tell a brief example/story of your experiences.

Before You Hang Up

- Thank the interviewer for the opportunity.
- Get the correct spelling of your interviewer's name.
- Get contact information for follow-up questions.
- Ask about the hiring timeline, "When are you looking to have a decision made?"

After the Interview

- Take notes about what you were asked and how you answered.
- Follow up with a thank-you note that reiterates your interest in the job.

Case Interviews

Certain employers — especially management consulting firms — use a "case interview" technique to determine how well-suited you are to performing their type of work. Case interviews are used to measure your problem solving ability, your tolerance for ambiguity, and your communication skills along several dimensions.

In a typical case interview, candidates are first introduced to a business dilemma facing a particular company (often drawn from the interviewer's professional experience). Next, depending on the length of the case, you will begin a process in which you and the interviewer engage in an open dialogue about various aspects of the case. Occasionally, the interviewer will help to guide the discussion but will often expect that you ask probing questions to uncover key information about the case facts, identify key business issues, and discuss how you move toward a possible resolution. In this way, employers hope to learn about your analytical skills, specifically, how you identify, structure, and think through problems under pressure. Consequently, your approach to a case is more important than the specific content of your answers. Employers encourage that you *think out loud* as you attempt to "crack" a case because it allows the interviewer to evaluate your thought process. Therefore, they will also evaluate your interpersonal skills and ability to communicate your recommendations and solutions to the presented business problem.

While there are many types of case interviews, most will involve at least one of the three following components:

- Brainteasers
- Estimation (Market Sizing) Questions
- A Specific Project or Business Case

Brainteasers

Brainteasers can be little or complex logic puzzles. These can involve using some quick math and give you a chance to demonstrate your conceptual skills to the interviewer. Your answers should be thoughtful and include some creativity in arriving at a solution.

Some sample brainteasers are:

- *"Why are man-hole covers round?"*
- *"If a wall clock reads 3:15 pm, what is the angle between the hour and the minute hands?"*
- *"How would you weigh a plane without scales?"*

- *"Which would you rather have, a trunk full of nickels or a trunk half full of dimes?"*

Estimation Questions
Estimation Questions may be somewhat longer than brainteasers and require you to be adept in both making assumptions and working with numbers, facts, and the unknown. Usually, with these types of questions, you will likely need pencil and paper. Again, employers are looking for your ability to be creative and will be evaluating your quantitative ability very closely, so it is imperative that the numbers and formulas you create in your solutions be correct.

- *"How many car batteries are sold in the US each year?"*
- *"How much does all the ice in a hockey rink weigh?"*
- "*Approximately how many pharmacies exist in the U.S.?"*

Project Case
The third type of question found in most case interviews involves analyzing a project or a business case. These can be written or verbal cases and will take anywhere from 45 minutes or longer to process with the interviewer. Cases can be specifically created for the interview process or can be a past or current situation affecting a business or organization. As such, the best way to begin learning how to approach the different types of business cases comes with practice. Some firms will have sample cases for students to become familiar with the form, and there are many resources available to get yourself acquainted with this popular interview method. The following are just a few examples of project/business cases used in a case interview setting:

Sample case #1: *"You are called in by Pizza Hut to help them develop a strategy for entering the home delivery market in which Domino's has the dominant position. As lead consultant on this project, what would you do?"*

Sample case #2: *"Your client is a mid-sized hotel chain. How would you develop a pricing strategy for the client?"*

Sample case #3: *"A US company who has just created a new biotech device is thinking about expanding internationally. If its labor costs are competitive with industry standards, what issues might influence its decision?"*

Your first challenge is to identify the type of problem the case addresses and decide whether there is an appropriate framework to structure your analysis. Popular frameworks are often derived from business concepts and several can be learned in the process of preparing for your interview. For example, each of the above scenarios addresses three different types of business situations: entering a new market, developing a pricing strategy, and developing a new product. Next, the frameworks that you use to begin your analysis will allow you to push deeper into each issue, starting with the most important first. Questions to ask yourself about a case:

- *What additional information do I need to know?*
- *What are the key issues to be addressed?*
- *What are the key findings from the analysis?*
- *What is my hypothesis for the solution?*

Overall, as your interview progresses, listen carefully and clarify anything you do not understand before proceeding. Follow the interviewer's lead. Each individual will have a unique interviewing style and take you through the case in different ways depending on his or her priorities.

What Employers Look for During a Case Interview

- Enthusiasm for typical consulting issues
- Ability to think out loud and brainstorm
- Listening skills and the pace of candidate's response
- Ability to restate the problem and verify the objective of the business or project
- Conciseness and focus when possible
- Use of sketches, charts, or diagrams to describe your analysis and logic
- Ability to create reasonable hypotheses and put them to the test
- Ability to summarize final recommendations in a clear and concise way, identifying which case facts lead to your solution
- Confidence in your ideas

Common Mistakes to Avoid During a Case Interview

- Ignoring the cues of the interviewer
- Use of business terms in the wrong context
- Asking open-ended questions throughout the entire interview (or asking a long series of questions without explaining why you need the information)
- Making assumptions that utilize extremely large numbers and percentages and not being able to use them comfortably in your analysis
- Appearing disorganized or having scattered notes on the specific business or project case
- Spending too much time analyzing the smaller aspects of the case and not referring back to the big picture or problem
- Not being able to respond well to criticism or questions about your assumptions or your solutions

Additional Case Interview Resources
Many of the medium to large consulting firms that recruit from universities have practice cases somewhere on their website. As consulting firms increase their recruitment of students from a diverse set of majors, employers are looking to expose non-business and management majors to the dynamics of case interviews that will help prepare candidates for the interview process.

In addition to these websites, there are a variety of print, online, and campus resources to help you.

- MIT Sloan Business Club: web.mit.edu/sebc/
- Consulting Club at MIT Useful Links: web.mit.edu/mitconsulting
- Vault Career Guides: www.vault.com
- www.casequestions.com
- www.acethecase.com

Site Visit Interviews

After an on-campus interview, lead candidates are usually invited to visit the employer's facility. While on-campus screening interviews are important, on-site visits are where jobs are either won or lost. Work with the employer to schedule the on-site visit at a mutually convenient time. Sometimes employers will try to arrange a site visit for several candidates to take place at the same time, so there may not be much flexibility.

Notification of an on-site visit may be by telephone or email. Respond promptly if you are sincerely interested in this employer. Decline politely if you are not. Never go on a plant trip for the sake of the trip. If you are attending, document the name and phone number of the person coordinating your trip. Verify who will be handling trip expenses. Most medium and large-size companies (as well as many smaller ones) will pay your expenses, but some will not. This is very important because expenses are handled in various ways:

- the employer may handle all expenses and travel arrangements;
- you handle your expenses and arrangements (the employer may assist with this), and the employer will reimburse you later;
- the employer may offer an on-site interview, but will not pay for your travel expenses.

Bring extra copies of your resume, copies of any paperwork you may have forwarded to the employer; names, addresses, phone numbers and email addresses of your references; an updated college transcript; a copy of your best paper as a writing sample; a notebook and a black and/or blue pen for filling out forms and applications.

Once again, your role at the interview is to respond to questions, to ask your own questions and to observe. Be courteous to everyone regardless of his or her position; you never know who might be watching you and your actions once you arrive. Treat the custodian the same as you would the CEO.

Soon after the site visit, record your impressions of your performance. You should have the name, title, address, phone number, and email of everyone who was involved in your interview so you can determine which individuals you may want to contact with additional questions or follow-up information. Also, a thank-you letter or email should be written to the person(s) who interviewed you. These should be sent no more than 24 hours after the interview.

The site visit is a two-way street. Just as the employer is evaluating you, you are there to evaluate the employer and to determine if your expectations are met for job content, company culture and values, organizational structure, and lifestyles (both at work and leisure). Take note of how the employees interact with each other and their supervisors and also assess the physical work environment. If you decide that the job is right for you, do not be afraid to tell the employer that you feel that there is a good fit and you are eager to join the team.

Dress Code and Etiquette for Interviews

"What **am** I going to wear?" We get asked this question nearly every day during the recruiting season and the answer is always "It depends." To help yourself answer this question, use with common sense. Start by asking yourself *"What kind of company will I be interviewing with?"* If it is a *Fortune* 500 company, you should wear a traditional suit. But maybe you will be seeing a young software company and you heard the recruiter showed up for interviews last year in a t-shirt and sandals. Use your own discretion but we suggest you dress the way you would if you were giving an important presentation at the company or attending a business meeting. Feel free to schedule an appointment or come to drop-in hours and speak with a career services professional if you're unsure.

Men

Suits — A traditional suit is preferred to a blazer. The color should either be a dark blue or gray with a pressed long-sleeved (even in summer!) white dress shirt.

Shirts — White shirts are always your first choice. Solid blue is an acceptable alternative. Get a plain or button down collar, and choose cotton material.

Grooming — Avoid heavy cologne or aftershave.

Socks — Dark, neat and preferably over the calf. Avoid white athletic socks.

Shoes — Clean and polished leather lace-up black or dark brown shoes are best. Avoid shoes with a run down heel.

Neckties — Be sure the tie coordinates with the suit, is solid or has small neat patterns. Be sure the knot is neat and centered on your neck. The bottom of the tie should just reach your belt.

Belts — Wear a black or brown belt, one inch wide, no large buckles.

Hair — Clean, well-groomed and professional looking. Be sure beards and mustaches are neat and trimmed.

Accessories — No flashy cuff links, rings or gold chains. Wedding or college ring is fine. No visible body piercing.

Women

Suits — A solid navy, grey or black suit with a solid or light colored blouse is recommended for most positions. Business dresses are acceptable. Avoid frilly collars and cuffs.

Shirts — A light colored blouse is ideal.

Makeup — Natural looking. Avoid bright colors. Use a neutral or clear nail polish on clean and manicured nails. Avoid heavy perfumes.

Hosiery — Light, natural color, plain style (no patterns).

Shoes — Should compliment the color and style of the interview suit. Low to medium heels are ideal. Basic pumps, toes should be closed, no strappy shoes, and avoid multi-colored trim.

Hair — Should be freshly cleaned and neatly styled.

Accessories — One, non-dangling earring per ear, one or 2 rings per hand. No dangling or distracting bracelets. No visible body piercing beyond earrings.

Dining Etiquette for Interviews

If you are lucky, one round of the interview process will take place over some sort of a meal setting. As a rule of thumb, when you face a full battalion of knives, forks, and spoons, start with the flatware the furthest from the plate first. If you are unsure which fork to use for your salad course, choose the one with the slightly smaller prongs.

As soon as you are seated, put your napkin on your lap. When you use your napkin, gently dab at your lips. It is meant to catch food from falling into your lap and it should gently dust the crumbs from your lips. When you are finished, place your knife and fork so they lie horizontally across your plate, and place your napkin next to your plate. Do not refold it. Do not leave it on the chair when you get up to exit the restaurant.

Dining Tips

- If you are not sure what to order, follow your host's lead.
- If the recruiter is not first in line to order, ask him/her, "What do you recommend?"
- A chicken breast or vegetable plate is always safe.
- Stick to soft drinks, tea, coffee, and water. Avoid beer, wine, and mixed drinks.
- Cut one bite (meat, fruit, or vegetables) at a time. Keep your fork prongs pointed down, not up.
- With dinner rolls, break off and butter one small piece of bread at a time; avoid making a sandwich.
- Never make slurping or yummy sounds.
- When sharing a sauce with others, spoon some of it on to your plate; don't dip your food into it.
- If you need to leave the table temporarily, place your napkin on your seat.
- Keep your elbows off the table.
- Drink from the glass to your right.
- Eat at the same pace as your host or hostess.
- Be prepared to be conversational.
- Skim the menu quickly; order a medium priced entrée that will be the least messy to eat.
- Relax and keep the conversation focused on business-related or casual topics.
- Say please and thank you to the waiter.
- Don't talk about personal relationships, recent parties, politics, sports, or religion.
- Don't eat the garnish.
- Don't drink alcohol if you are under age 21; don't have more than one drink if you are 21 or over and the recruiter insists.
- Don't argue over the check or offer to pay the tip; the host who invited you must take care of both.

Negotiating Salary and Benefits

Before you start negotiating your salary, be sure that you have done enough research to know what you can realistically expect. Be aware that you will be offered a competitive salary based on what you are worth — not on what you want or what others are getting for similar jobs. Each person is unique, and "the going rate" is little more than a guideline. Salaries can vary depending on where the job is located.

Did you know?
The average negotiated increase in salary of undergraduate was $6,332 and $11,159 for master's students. The average negotiated increase in bonus was $8,973 for undergraduates and $16,656 for master's students.
Source: GECD 2014 Graduating Student Survey

Employee benefits at most large companies are generally worth another thirty percent or more on top of your salary. The normal benefits include paid vacation (usually two weeks for the first year), health insurance, tuition assistance for courses taken after work, contributions toward your 401k, and an opportunity to buy stock in the company with the company making a contribution toward the purchase. In addition, some companies may also include life insurance and /or relocation expenses in their benefit packages.

It is also possible to work for a company and receive no benefits whatever. This is typically the case if you sign on as a consultant, or as a contract worker. Your salary should be larger in this case because it is up to you to pay for health insurance and to provide for your retirement.

Did you know?
17.5% of MIT undergraduate and 26.0% master's students negotiated their salary. 13.5% of undergraduates and 21.7% of Master's students negotiated their bonus.
Source: GECD 2014 Graduating Student Survey

Small companies may not have the cash flow to offer large benefits. They may make up for this by giving stock options (the chance to buy the stock later at an earlier and lower price), or a new startup company may pay partly in stock or give an outright

gift of stock. Obviously, the value depends on the success of the company.

Research salaries for the industry and position you seek by visiting:

- gecd.mit.edu/resources/data (Graduating Student Survey)
- www.glassdoor.com
- www.payscale.com
- www.salary.com
- www.rileyguide.com/salguides.html
- jobstar.org/tools/salary
- www.bls.gov/oes/home.htm
- www.salaryexpert.com/

The Art of Negotiating

Once you have been offered a job, you have the opportunity to discuss with the employer the terms of your employment. Negotiating with your potential employer can make your job one that best meets your own needs as well as those of your employer. To ensure successful negotiations, it is important to understand the basic components. The definition of negotiation as it relates to employment is: a series of communications either oral or in writing that reach a satisfying conclusion for all concerned parties, most often between the new employee and the hiring organization.

Negotiation is a planned series of events that requires strategy, presentation and patience. Preparation is probably the single most important part of successful negotiations. What follows are some suggestions that might help in your preparation.

Research

Gather as much factual information as you can to back up the case you want to make. For example, if most new employees cannot negotiate salary, you may be jeopardizing the offer by focusing on that aspect of the package. Find out about the costs and benefits associated with the health plan, dental plan, retirement package, leave entitlements, and other benefits.

Psychological Preparation

Chances are that you will not know the person with whom you will be negotiating very well. If you are lucky enough to be acquainted, spend some time reviewing what you know about this person's communication style and decision-making behavior.

In most cases this person will be a stranger. Be assured that he or she will expect some level of negotiation, even if it only relates to your start date. How will you psyche yourself up to feel confident enough to ask for what you want? How will you respond to counteroffers? What are your alternatives? What's your bottom line? In short, plan your strategy.

Create a list of all the items you want to negotiate. Be sure you know exactly what you want, not approximately. This does not mean you will get everything you want, but having information clearly outlined in your head will help you determine where you can compromise in return for things that are more important to you. Unless you know what you want, you won't be able to tell somebody else. Clarity improves communication, which is the conduit for effective negotiations.

Dollars and Sense

Always begin by expressing genuine interest in the position and the organization, emphasizing the areas of agreement but allowing wiggle room to compromise on other areas. Be prepared to support your points of disagreement, outlining the parts you would like to alter, your suggestions on how this can be done and why it would serve the company's best interests to accommodate your request.
Back up your reasons for wanting to change the offer with meaningful work-related skills and positive benefits to the employer. Requesting a salary increase because you are a fast learner, or have a high GPA usually are not justifiable reasons in the eyes of the employer. Meaningful work experience or internships that have demonstrated or tested your professional skills are things that will make an employer stop and take notice.

State all the items to negotiate at the beginning. Cite those areas in which you know you already agree upon. Follow with areas that are open to negotiation.

It is sometimes more comfortable for job seekers to make this initial request in writing and plan to meet later to hash out the differences. Keep in mind that the employer has chosen you from a pool of qualified applicants, so they need you as much as you need them.

Did you know?
The top five factors that affect whether MIT undergraduate students accepted a job were:
- job content
- creative and challenging work
- fit with culture/environment
- one of their top choices
- opportunity to make an impact

Salary was 14th on the list.

Source: GECD 2014 Graduating Student Survey

Do not rush the process. Remember this is a series of volleys and lobs, trade-offs and compromises that occur over a period of time. It is a process — not a singular event!

Once you have reached a conclusion with which you are both relatively comfortable, present in writing your

interpretation of the agreement so that if there is any question, it will be addressed immediately. Negotiation, by definition, implies that each side will give. Do not perceive it as an ultimatum.

If the employer chooses not to grant any of your requests—and realistically, that can happen — you will still have the option of accepting the original offer provided that you have maintained a positive, collaborative and friendly atmosphere during your exchanges. You can always re-enter negotiations after you have demonstrated your worth to the organization.

Money Isn't Everything

There are many things you can negotiate besides salary. Benefits can add thousands of dollars to the compensation package. Some negotiation points can include:

- Vacation time
- Paid personal leave and sick days
- Medical / dental / health coverage
- Child care or elder care
- Discounts on the company's products and services
- Gym membership
- Stock options / annual bonuses
- Retirement / disability and life insurance
- Flexibility of hours
- Relocation package
- Professional memberships / affiliations
- Tuition reimbursement for continued education

For more information on negotiating job offers, review the 12 step negotiating process at gecd.mit.edu/jobs/negotiate, and see our online workshops at gecd.mit.edu/resources/workshops.

Chapter 5
Academic Pathways

Throughout your MIT career, you will make many choices related to academic pursuits. Global Education and Career Development can assist you with a broad variety of career and global education choices, whether you are a freshman or a graduate student in your final year. More and more of our students are going global while at MIT, and our Global Education team can help you pursue study abroad and work abroad experiences. Many undergraduates will consider graduate or professional school. Graduate students may wish to pursue postdocs or faculty positions within academic careers. The materials and advice in this chapter can help you with some of these decisions.

Choice of Major — Consider Your Options

To help you weigh options for your choice of major at MIT, ask yourself these questions about each academic department/field you are considering:

Appeal of Area of Study

- Will you enjoy this major for its own intrinsic value?

Level of Challenge

- Do you think you can perform well in this field?
- Is your motivation strong enough to enable you to succeed in this major?
- Are you choosing this major because it is easy? Because it is hard?

Department Characteristics

- How big/small is the department?
- How do you relate to other students in this major?
- Are the faculty accessible? Do you seek them out for informal discussions and other interactions?
- Are there activities in the department that bring students together? Are there activities that bring students and faculty together?

Courses Within Your Major

- Will this major help you acquire prerequisites needed for graduate studies you may be considering?
- How many credits does this major require to complete a degree? Do you wish to focus largely on one department, or do you want flexibility to study in other departments as well?

Global Experience

- How can you incorporate study abroad, research abroad, work abroad or service abroad into your academic plan?

UROPs/Internship Programs

- What opportunities are there for you to get experience in your major that will help prepare you for your potential career?

Skills

- What kinds of technical, professional or other skills will you be developing in this major?

Family, Peers, Outside Influences

- How are outside pressures from family, peers and the job market influencing your decision?

Here are some additional resources for you to consult regarding choice of major:

- Choosing a College Major (QuintCareers): www.quintcareers.com/choosing_major.html.
- "How to Choose a College Major" by Linda Landis Andrews.
- MIT Alumni Association's Infinite Connection: alum.mit.edu. Learn what career paths are possible for the major you are considering.
- *Occupational Outlook Handbook*: www.bls.gov/ooh.
- O*NET OnLine: www.onetonline.org.
- Sloan Career Cornerstone Center — excellent write-ups on career paths in engineering and science, www.careercornerstone.org.
- Office of Undergraduate Advising and Academic Planning (UAAP): **mit.edu/uaap**. The UAAP suports anumber of programs that enich and support undergraduate education at the Institute.

Global Education

Global Education is the one-stop office for information and advice on how to go global! We offer one-on-one advising sessions to help you identify and explore the various options that best fit your academic plans and professional goals. In addition, we can help you with health and safety planning and cost-saving ideas for living overseas. We offer a series of presentations and workshops, pre-departure and re-entry meetings and are here as a resource to help you prepare for a meaningful and successful time abroad.

In addition to general support related to global educational opportunities, Global Education provides advising for students who are seeking to study abroad and who are interested in applying for a distinguished fellowship. We are here to assist you in identifying the program(s) that best fit your needs, prepare you for the transfer credit process,

and work with you to find the right resources regarding health and safety and logistical details such as housing, insurance coverage abroad, and passport and visa information. Please find more information about specific study abroad opportunities in the table on this page.

Global Education Opportunities

Benefits of Going Global

The world today is a very different place than it was even a few years ago. Business and research are conducted across national boundaries, different time zones, and cultural contexts. Language skills and cultural competency in other world cultures are in demand across all professional fields. This means that as an MIT graduate you will be called upon to work effectively with global collaborators and across transnational engineering and science environments. In this increasingly global context, deciding to take advantage of a global opportunity could be one of the best decisions you make as an undergraduate.

Students at MIT are able to engage with the world in a variety of ways. Students can enroll in a study abroad program taking classes in English or in a foreign language, undertake a research project, participate in an internship or assist underserved communities through public service. Our partner offices include:

- MISTI (internships) — web.mit.edu/misti
- Public Service Center (fellowships, grants, etc.) — web.mit.edu/mitpsc
- D-Lab (international development) — d-lab.mit.edu
- UROP (IROP - international research) — web.mit.edu/urop/basicinfo/irop.html
- Alumni Association (externships) — alum.mit.edu/students/NetworkwithAlumni/ExternshipProgram

In addition to the listings above, a wider collection of global opportunities can be found on the MIT "Go Global" website at **goglobal.mit.edu**.

Study Abroad Opportunities

Planning Study Abroad

You have probably already heard from other MIT students about the life altering experience of their study abroad program. It is never too early to start thinking about your own study abroad experience and to begin planning for it. Be strategic in thinking about the study abroad possibilities that might benefit you most. Contemplate these programs from the point of view of your major, as well as your professional and research interests and goals. The more integrated your experience abroad is with your goals and interests, the more you will benefit from that opportunity.

If you have already developed an interest in a particular culture or region of the world by your freshman year, you may wish to start learning (or continue learning if you started in high school) the foreign language most commonly used in that culture or region. You might also want to explore the international locations of exciting developments in the academic/research fields that interest you.

If you start to think about study abroad in your sophomore or junior year, you should still be able to find a program that

Study Abroad Programs

MIT students who plan to study abroad have many exciting options from which to choose. The following table includes the various categories of opportunities with examples. Please note that these are only examples of some of the opportunities offered at MIT.

Program Type	Year-Long	Semester	IAP	Summer
MIT-Managed				
Institute Wide	CME	MIT-Madrid (spring only)	IAP-Madrid	
Departmental	Political Science	Aero/Astro Architecture Materials Science Political Science		
Direct Enrollment Through MISTI	Examples include: Ecole Polytechnique,	Examples include: Ecole Polytechnique,	France	France
Other Direct Enrollment	Examples include: LSE (General Course) U. of Edinburgh	Examples include: Universities in Australia Barcelona, Spain U. of Edinburgh		LSE
Outside Providers	Locations include: Oxford, UK Australia New Zealand China	Locations include: Oxford, UK South Africa China Italy	Locations include: Mexico Ireland Argentina China	Locations include: France Germany Ireland Spain, China

fits your interests and goals. Even in your senior year you may find some opportunities, especially internships and post-graduate foreign fellowships.

Curious to hear from other MIT students' abroad experiences? GECD has a team of peer mentors who are happy to share their experiences and give you insights on how to prepare and what to expect while abroad. Visit **gecd.mit.edu/go_abroad/study/explore/peers**.

Deadlines

Please keep in mind that each study abroad program has its own application deadlines. In addition, Global Education has its own internal deadlines (May 1 for summer, full-year or fall semester study and December 1 for spring semester and IAP study) to ensure that students are prepared and that all the relevant MIT offices can be informed of the students approved for study abroad.

How to Begin Study Abroad

We invite you to visit the Study Abroad website (gecd.mit.edu/go_abroad) and we look forward to meeting with you to discuss your study abroad ideas and help you find a program that will work best for you. Please make an appointment to meet with us by contacting Global Education, E39-305, studyabroad@mit.edu or at 617-253-0676.

The Go Global website has helpful materials about planning ahead, financing our abroad experience, travel preparation, and health and safety tips at **goglobal.mit.edu/plan-ahead**.

Distinguished Fellowships

The GECD Distinguished Fellowships team, in E39-305, is available to provide support and guidance for students preparing applications for the most prestigious awards for foreign study. In many cases, these awards pay for the full costs of graduate programs or international research. They are wonderful opportunities to further one's horizons without burdening oneself. These awards, including but not limited to the Rhodes, Marshall, Mitchell, Gates-Cambridge, and Fulbright, have fostered the careers of the world's best students. Winners have gone on to become a United States President, a leading string theorist (Brian Greene), CEOs, and even MIT professors. Please keep in mind that these types of awards require a great deal of work and have extremely strict deadlines, so please visit our website for the application schedule and timeline. If you are interested in learning more, please visit our website gecd.mit.edu/fellowships and contact Kimberly Benard (benard@mit.edu or 617-253-4378) for an appointment.

Key Qualities Valued in Distinguished Fellowship Competitions:

- Strong Academic Record
- History of Volunteering/Public Service
- Desire for Further Research or Studies

Graduate School Advising

You may be considering earning an advanced degree for several reasons, including the opportunity to gain knowledge in a particular field, an interest in expanding career opportunities and increasing earning potential, or postponing a job search until economic conditions improve. A 2014 survey conducted by Global Education and Career Development found that 31.9% of graduating seniors planned to pursue advanced degrees right after graduation. Although certain advanced degree programs prefer applicants with experience in the work force (MBA programs, for example) it is never too early to explore your options and program admission requirements.

Strong undergraduate academic preparation is essential to succeed in graduate school. Key skills for success as a graduate student include: (1) critical thinking, (2) analytical abilities, (3) research abilities, (4) written communication, (5) verbal communication, (6) time management, (7) self-motivation, and (8) self-discipline. As you contemplate applying to graduate school, carefully consider whether graduate school is essential at this point in your career.

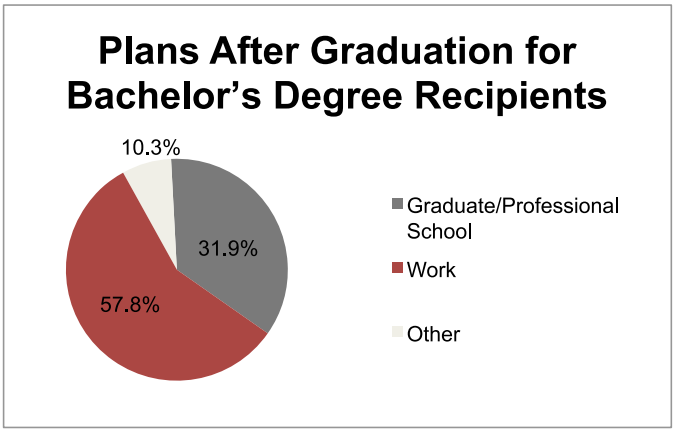
Range of Degrees

Graduate degrees include:

- M.S.= Master of Science
- M.A.= Master of Arts
- M.B.A.= Master of Business Administration
- M.F.A.= Master of Fine Arts
- Ph.D.= Doctor of Philosophy
- Sc.D.=Doctor of Science
- Ed.D.=Doctor of Education
- M.D.= Doctor of Medicine
- D.D.S.= Doctor of Dental Surgery
- D.V.M.= Doctor of Veterinary Medicine
- J.D.= Juris Doctor
- LL.M.= Master of Laws
- J.S.D.= Doctor of the Science of Law

Top Criteria to Select a Graduate Program

- Match between your career interests/goals and the program
- Quality of the program
- Department and faculty strength and reputation in the profession
- Faculty/student ratio
- Program culture and environment
- Program costs and Financial Aid resources
- Internship or field-work opportunities
- Quality of research facilities, laboratories, and libraries
- Geographic location
- Recent alumni outcomes
- Connections with alumni for purposes of discussing how graduate school may enhance your opportunities



Source: GECD 2014 Graduating Student Survey

The best experts on assistantships and fellowships, whether you are interested in MIT or other graduate schools, are the staff in the Office of the Dean for Graduate Education (3-138). See their website for up-to-date information on the subject, web.mit.edu/odge/finances. They also have various compendia listing individual fellowship programs. For information on the aid available in a particular discipline, a good place to turn is the graduate office in the corresponding MIT department.

Most graduate programs require you to take a standardized exam such as the GRE, GMAT, LSAT, or MCAT. Ask the programs you are interested in what exam scores are accepted and what the typical score range is for admitted students. Be sure to study for these tests as they can involve elements you may not have learned yet. Scores are usually good for multiple years and many students take the exams as undergraduates.

Resources for Graduate & Professional Schools

- GECD Career Services staff are available to meet with students interested in applying to graduate and professional schools. Visit during drop-in hours or schedule appointments through CareerBridge , www.myinterfase.com/mit/student .
- General information for those considering Graduate or Professional Schools: see the GECD website, gecd.mit.edu/grad_school
- Applying to Graduate School Tipsheet, gecd.mit.edu/resources/guides
- GRE www.ets.org/gre
- Law School Admission Council (LSAC): www.lsac.org Includes information on LSATs, Law School admissions criteria, and Credential Assembly
- Graduate and Professional School Essay Writing Workshop: gecd.mit.edu/resources/workshops
- Official GMAT website: www.mba.com (and www.gmac.com) Includes information on taking the Graduate Admission Management Test (GMAT), School and Program Requirements, and other information.

Personal Statement/ Essay

Regardless of the type of school you are applying to, you will be required to submit a personal statement or statement of purpose as part of the application process. Graduate school application essays typically ask applicants to discuss their previous experience, future professional or research goals, and how they believe that the graduate program can assist them in achieving those objectives. Still others will have you report on some aspect of your chosen field—its future, challenges or barriers, or notable achievements. Be sure to do your research and provide a comprehensive, thoughtful response. Graduate programs seek individuals with clear commitment to the field, who have corresponding ideas and aspirations. The personal statement provides the applicant with the opportunity to articulate these goals and display strong writing skills. Your essay should be well thought out, concise, compelling, and interesting to the reader. Remember, admissions officers read hundreds of personal essays. It will be important for you to keep in mind the following suggestions:

1. Start your essay with something that will grab the reader's attention. Personal anecdotes can often help draw the reader into the essay.

2. Make the essay personal. Do not simply repeat the information that can be read on your application. Provide the reader with an inside view on your thoughts, interests and drives.

3. Make your motivation and commitment clear to the reader. The admissions officer wants to get a sense from the essay that you are extremely interested and motivated to obtain the graduate degree and will apply the education to your professional work.

4. Create a well-written document. Your essay is a sample of your writing abilities. It is important that you convey your thoughts clearly, with carefully chosen vocabulary and correct grammar.

For more information, attend the Essay Writing workshop offered by MIT Career Services, gecd.mit.edu or visit the Writing Center in room E39-115.

GPA

GPA standards vary among different programs. While these numerical records are an important factor, they are not the only thing considered. Students with a range of GPAs and test scores are accepted. Most of the time, the average GPA of students currently enrolled in the program or the minimum GPA accepted can be found on the admissions webpage. Admissions committees consider all aspects of an application when making selection decisions.

Prehealth Advising

Prehealth Advising staff work with students interested in applying to medical, dental, veterinary medicine, and other health-related professional schools.

The following services are available to both current MIT students and alumni/ae:

- Drop-in Hours: 15-minute sessions, set up to answer quick questions.
- Appointments: 30-60 minute sessions, via phone, Skype or in-person. Call our front desk (617-715-5328), or come into our office (E39-305) to schedule an appointment.
- Mock Interviews: 45-60 minute sessions to help current applicants prepare for medical/health profession school interviews.
- Essay Critiques: Advice on how to prepare the application essay is provided, either through email or during an appointment.
- Credential Service: Service for Prehealth students and alums that stores recommendation letters and sends letters electronically to application letter services (AMCAS, AADSAS, etc.) or directly to schools.

More information on our services and upcoming events can be found at gecd.mit.edu/grad_school/health

Considering & Exploring a Health Profession/Career:
Individuals interested in health-related careers should consider the following:

- What is my motivation for entering this career?
- How can I explore this career during my time at MIT?
- What are my core interests and skills and how do they align with this career?

To help answer these questions, we strongly recommend that you set up an appointment with a member of our staff to discuss your interest in these careers. In addition, we encourage the use of the resources on the Prehealth Advising website at gecd.mit.edu/grad_school/health.

GPA:
Applicants with a range of GPAs and test scores are accepted, since admissions committees consider all aspects of an application when making selection decisions. That being said, GPA is an important component of an application, as performance in course work completed prior to applying provides evidence that applicants are well prepared for the academic rigor of medical and other health profession schools.

Course Requirements:
There is no required major for applying to health related professional schools. There are however, a number of recommended courses one must take prior to applying. Review the recommended course list online with your academic advisor and meet with a Prehealth Advising Staff member if you have any questions.

Volunteer / Service Activities:
Admissions officers are interested in applicants who, in addition to having good academic credentials, are humanistic in nature, who care genuinely about others and have shown evidence of this interest through volunteer or community service activities. Your participation in volunteer work and leadership activities can help develop personal qualities such as integrity, breadth of interest, human relations skills, and motivation towards a career in the health professions.

Exploration
It is important to gain exposure to the health professions through informational interviews, shadowing, and volunteering in health profession settings to ensure that a medical/ health profession career is a good fit. Prehealth Advising offers panels, speaker events, workshops and the Physician Shadow Program to provide students with opportunities to explore the health professions.

Physician Shadow Program
This program provides students the opportunity to experience a typical day for a physician and to explore different areas of specialty in medicine. Shadow opportunities are offered at the Massachusetts General Hospital (MGH), and Boston's Children's Hospital.

Prehealth Timeline Overview

Freshmen & Sophomore years
(or 3-4 years prior to entry)

- Review recommended course list and complete pre-requisite courses
- Explore the field of health care through informational interviews, job shadowing, summer programs and volunteer work
- Gain experience that helps develop skills that are relevant in the field of health care through internships, community service, research, student organizations, etc.
- Prepare for the MCAT, DAT, or other standardized exam required for application
- Participate in a Prehealth Advising Meeting. This meeting provides an opportunity to discuss your motivation and assess your readiness for the application process.

Junior year
(or 2 years prior to entry)

- If eligible, request the MIT Committee on Prehealth Advising (COPA) Letter.
- Take the MCAT, DAT, or other standardized exam required for application.
- Request 3-5 letters of recommendation from faculty and supervisors.
- Write the application essay or personal statement.
- Submit the primary application (AMCAS, ADSAS, etc.)

Senior year
(or 1 year prior to entry)
- Complete secondary applications
- Interview

A more detailed Prehealth Timeline can be found at: gecd.mit.edu/sites/default/files/phtimeline.pdf.

Academic Careers

Nearly half of MIT's doctoral graduates will pursue an academic career (junior faculty position or postdoc) upon completion of the doctoral degree. Career Services offers several services for those considering an academic career:
- Self-assessment tools to help you learn more about yourself and ultimately help you identify the right careers for you.
- Individual advice on any aspect of the academic career search.
- Resources to help you prepare for the academic search: gecd.mit.edu/career/graduate-student-services/graduate-students-prepare
- Graduate Student Survey and Earned Doctoral Degree Survey information to help you understand where your peers have gone, salaries they've earned, and more. gecd.mit.edu/resources/data
- Academic Career Series — faculty and alumni presentations on various topics, co-sponsored by GECD, Graduate Student Council, and Postdoctoral Advisory Council (throughout the year) .

In addition, there are services available through the MIT Writing Center web.mit.edu/writing (including opportunities to practice the job talk) and the Teaching and Learning Laboratory web.mit.edu/tll.

For information about Distinguished Fellowships and other scholarship opportunities see gecd.mit.edu/goabroad/fellowships.

Sample Statement of Research Interests

CURRENT RESEARCH

Active Control of Rotorcraft Vibration

I am currently working with Boeing Helicopters to develop advanced control techniques for control of rotorcraft vibration, so that the vibration typically experienced by helicopters can be significantly reduced. My advisor Prof. Steven Hall and his former doctoral students developed the X-frame actuator for those purposes, and I am working on the design and implementation of the advanced Higher Harmonic Control (HHC) algorithms using the X-frame actuator for an MD-900 helicopter. The advanced HHC includes an intelligent anti-windup scheme, which shows better performance than traditional discrete HHC. The intelligent anti-windup algorithm ensures that the output signals from each controller do not saturate, so that multiple HHC systems can be implemented without causing any difficulties. The active rotor system with the advanced HHC algorithms will be flight-tested in 2003.

Active Control of Noise Radiated from Underwater Vehicles

I have worked with Northrop Grumman Corp. and Materials Systems Inc. to develop new technology for the reduction of radiated noise from vibrating underwater vehicles using smart structures technologies. This project has been funded by the Office of Naval Research, with an objective of developing "smart" underwater vehicle systems so that the enemy cannot detect attack in advance. My responsibility in this project is to develop the control architecture and methodology to reduce the radiated noise from vibrating structures. In order to accomplish this, I have designed two different controller architectures. The first one is the assembly of local controllers, which are implemented for each sensor/actuator pair to reduce its vibration level. The second one is a global controller, which makes the structure a weak radiator by coordinating the action of local controllers. In order to implement the global controller successfully, I have developed a new wavenumber domain sensing method and applied it to the feedback controller design for active structural acoustic control. The approach is to minimize the total acoustic power radiated from vibrating structures in the wavenumber domain. The new sensing method greatly simplifies the design of MIMO LQG controllers for active structural acoustic control by reducing the effort to model the acoustic radiation from the structure and allowing the systematic development of state-space models for radiating wavenumber components. Further, I have extended the concept to general complex structures, so that it can be applied for reducing radiated noise from any vibrating structures. The new sensing method is numerically validated on a thick-walled cylindrical shell with 55 piezoelectric panels mounted.

FUTURE RESEARCH GOALS

My future research goal is to develop "intelligent structural systems", from the micro-scales (MEMS) to macro-scales (aerospace systems and underwater vehicles), which will contain array of sensor/actuator pairs and embedded devices for controls and decision-making algorithms. Those systems should be able to coordinate large numbers of devices and adapt themselves to uncertain environmental changes in an intelligent manner. For this research goal, I will focus on the following three research areas. First, I will carry out research on structure/fluid/control interaction phenomena for complex systems. The phenomena will be critical design issues in those complex structural systems, both in micro- and macro- scales, so the fundamental understanding of the phenomena is very important to successful implementation of the structural/acoustic control algorithms. Second, I will extend my specialization in smart structures technologies to the development of advanced sensors and actuators for intelligent structural systems. Since the systems will contain arrays of embedded devices, such as micro-sensors and actuators, the development of novel sensors and actuators that can be coordinated and integrated within the systems will be critical in future areas of research. Finally, I will continue my research on advanced control and decision-making algorithms for noise and vibration reduction of complex structural systems. Some of the important requirements of the algorithms include: (1) the ability to handle many sensors and actuators in an efficient manner, (2) robustness to modeling error and uncertain environmental changes, (3) the ability to modify their functions adaptively even in the unexpected change in the plant or environment, and (4) the ability to detect the failure in the plant and maintain the performance by reconfiguring the algorithm architecture. As mentioned earlier, I have developed the novel wavenumber domain feedback controller design method for active structural acoustic control of complex structural systems, which satisfies the first and second requirements. I will continue my research to improve the performance of the method, and therefore to develop "intelligent control design methodology" for complex structural systems, so that those four requirements given above will be successfully satisfied.

Sample Statement of Teaching Philosophy and Interests

My teaching goal is for each and every student to leave my classroom with a solid understanding of engineering concepts and a sound background to analyze engineering systems. I strongly believe that a thorough understanding of undergraduate/graduate courses is most fundamental to young engineers for their future research. My responsibility as instructor would be to help students acquire a solid foundation in the subject matter, and to encourage them to build confidence in their knowledge of the course material, so that they can apply what they learned in my classroom to engineering problems with confidence. I have a very strong undergraduate and graduate education in mechanics, dynamics and controls. Also, I have extensive research experience in structural dynamics, acoustics, and controls, which would allow me to teach students fundamental concepts of engineering systems thoroughly. My primary interests in undergraduate/graduate level teaching lie in the following areas:

UNDERGRADUATE LEVEL

- **Mechanical Vibration —** This course would involve basic introduction to mechanical vibration, including free and forced vibration of single- and multi-degree of freedom systems, fundamentals of frequency and modal analysis, and approximate solution techniques.
- **Engineering Mathematics —** This course would be an undergraduate-level introduction to engineering mathematics, including linear algebra, differential equations, complex analysis, and Laplace and Fourier transforms.
- **Feedback Control of Dynamic Systems —** This course would involve introduction to design of feedback control systems, focusing on properties and advantages of feedback systems, time-domain and frequency-domain performance measures, stability and degree of stability, root locus method, Nyquist criterion, and frequency-domain design.

GRADUATE LEVEL

- **Advanced Structural Dynamics and Acoustics —** This course would first review single and multiple-degree-of-freedom vibration problems, using matrix formulation and normal mode superposition methods. Then, the course would present various topics in structural dynamics and acoustics, including time and frequency domain solution, random vibration, vibration and noise measurement and analysis techniques, wave motions in structures, structure/fluid interaction problems, and acoustic radiation.
- **Control of Structures —** This course would present fundamental control-structural dynamic interaction from a unified viewpoint, applicable to active control of flexible structures, and active structural acoustic control of structural systems.
- **Multivariable Feedback Control Systems —** This course would be an introduction to the state-space approach to control system analysis and control synthesis, focusing on design of "robust" controllers for mechanical systems, including optimal control methods and the Kalman filter.
- **Continuous and Discrete Time Signal Processing —** This course would provide a theoretical foundation of signal processing techniques necessary for mechanical engineers. This course would focus on the analysis and processing of experimental data, and real-time experimental control methods, including Laplace and Fourier transforms, spectral analysis, filter design, system identification.

These present general topics and I would be happy to teach more specific courses according to the needs of the students and the department.

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Ad Council

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MIT CAREER FAIR
Friday, September 25th 10am-4pm
Johnson Athletics Center

FULL-TIME ANALYST RESUME DROP DEADLINE
Saturday, September 26th 11:59pm
All candidates must submit a cover letter, resume (with SAT scores and GPA) and transcripts via the Career Center.

ON-CAMPUS INTERVIEWS
Friday, October 2nd

INTERNSHIP OPPORTUNITIES
2016 Summer Internship opportunities for students graduating in the spring of 2017 will be posted on Career Bridge later this fall.

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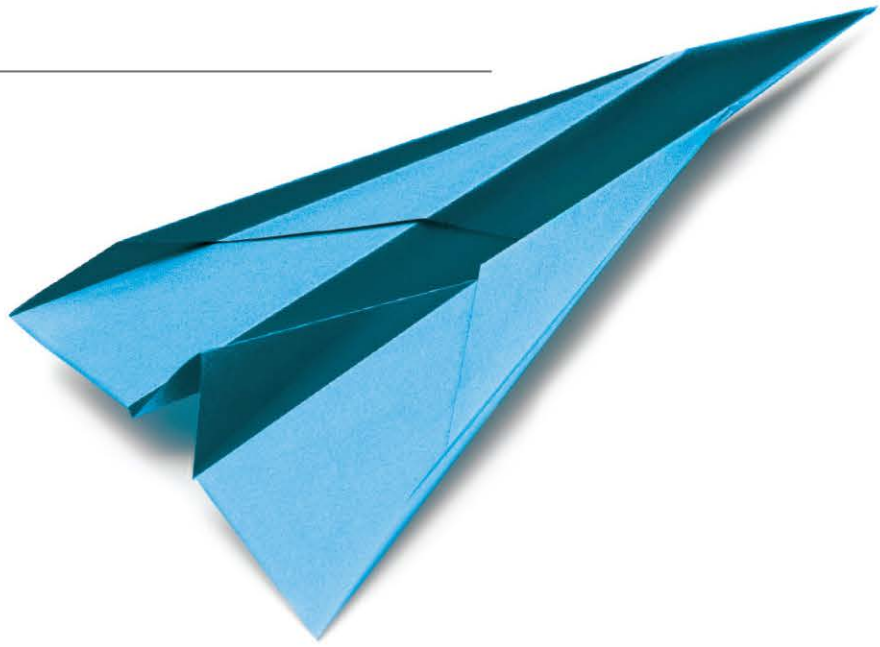

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