Caltech

2019-2020 Career Guide



CAREER DEVELOPMENT CENTER

CALIFORNIA INSTITUTE OF TECHNOLOGY

www.career.caltech.edu

California Institute of Technology

Career Development Center

STAFF:

Jarrid Whitney
Asst. Vice President for Student Affairs,
Enrollment & Career Services

Claire Ralph Director

Ariel Shoresh Manager for Employer Engagement

James Berk
Career Counselor/Pre-Health Advisor

Garineh Kouredjian
Career Counselor & Internship Advisor

Marie Lara Recruiting Coordinator



414 S. Holliston Ave MC 310-87 Pasadena, CA 91125 (626)395-6361 career@caltech.edu

Thanks to the Following Alumni for contributing to the Career Guide:

Alice Tang BS Chemical Engineering, 1979 Moraga, CA

Keith Karasek BS Physics, 1974 Physics, Mathematics & Astronomy Boston, MA

Marc Donner BS Electrical Engineering, 1976 Engineering & Applied Science New York City

Contents

Caltech Career Services	4
How to Register with the Caltech Career Development Center	5
Resume FAQs	6-8
Resume Template	9-10
Sample Undergraduate Resumes	11-15
Sample Graduate Student Resumes	16-18
Build Your Bullets Resume Starter	19
Cover Letter Template	20
Sample Internship Cover Letter	21
Interview Thank You Letter	22
Your Social Media Presence	23
Preparing for an Interview	24-25
Common Interview Questions and Answers	26-28
Networking	29-31
Workshop Calendar	32

Career Services

The Career Development Center's goal is to help you to develop and implement an effective career plan. We have information on jobs, internships, and graduate programs, as well as general advice and information to assist you. Some of our services include:

Career Advice

Career counselors can meet with you one-on-one to discuss your plans and help you find a focus. They also introduce you to a wealth of resources in the Center, at Caltech, online, and off-campus. If they can't answer your question or meet your need, they will connect you with someone who can. The Caltech Alumni Association will put you in touch with Caltech alumni who are happy to help you connect with people and resources relevant to your personal and career aspirations.

Assessment Testing

Are you uncertain about what option to pursue? Have you already chosen an option but aren't sure where it can take you? Career counselors are trained to administer a variety of career tests that can help you pinpoint careers that suit your interests, values, and personality type. Consult with one of our counselors for more information.

Career Fairs

The Career Development Center hosts career fairs with 100 hiring organizations each year in the fall and winter. Take the opportunity to meet directly with company recruiters to find full time positions or internships.

Employer Information Sessions

The Career Development Center sponsors sessions at which students can meet company recruiters and learn what they have to offer. Frequently these representatives are alumni, and can relate how their experiences at Caltech translated into their current career.

Workshops

The CDC offers workshops on topics such as job search strategies, resume writing, interviewing, graduate and professional school applications, and career-specific panel discussions.

Resume and Cover Letter Review

Are you wondering whether you've prepared your resume correctly, or have you put off preparing one at all? An appointment with a career counselor can help you learn the basics, from what information to include to what font to use.

Job and Internship Listings

You don't have to confine your job search to online search engines. The Career Center keeps updated lists of full- and part-time jobs, and internships online. Register for a Handshake account and frequently login to view these opportunities.

Recruiting

Recruiters from a variety of business organizations, labs, and government departments often spend a day on campus interviewing students for full-time employment or summer internships. Check your Handshake account to see who will be visiting campus during the coming academic year.

Website and Library

The Career Development Center website (www.career.caltech.edu) and library provide information about career exploration, emerging occupations, salaries, graduate and professional schools, resumes writing, interviewing, company profiles, and a variety of current full-time and summer opportunities.

Services are available to currently enrolled undergraduates, graduate students, Caltech/JPL postdocs and alumni.

How to Register with the Caltech Career Development Center

Currently enrolled students, alumni, and Caltech/JPL postdocs are encouraged to register with the Career Development Center's Handshake system. Registrants will gain access to the schedule of on-campus interviews, company information sessions, summer internships, and other employment opportunities.

With your Handshake account, you can:

- Apply for jobs and internships, participate in on-campus interviews
- Make an appointment with a career counselor
- RSVP for Career Fair, workshops, and employer information sessions
- Access company contact information
- Upload resumes, cover letters, and unofficial transcripts
- View the calendar of upcoming events

How to Register on Handshake:

- 1. Go to Handshake at www.caltech.edu/handshake
- $2\,.\,Log\,in\,with\,your\,Caltech\,ACCESS\,credentials\,.$
- 3. When logging in, click "set up single sign-on"
- 4. You will receive an email with further instructions after a few minutes
- 5. Complete your profile and upload your resume

Cancellation and No Show Policy

Failure to appear for scheduled interviews prevents other students from using your time slot and wastes the recruiter's time. Such behavior reflects poorly on your professionalism and could jeopardize Caltech's relationship with the employer and ultimately cause employers to suspend recruiting at Caltech. Therefore, it is important that when you sign up for an interview you commit to it. If you cannot make your scheduled interview, please be sure you take the appropriate steps. **Those who fail to cancel, as noted below, will have their recruiting privileges suspended.**

Canceling Interviews

INTERVIEW TIMES MAY BE CHANGED OR CANCELLED UP TO 48 BUSINESS HOURS BEFORE THE

SCHEDULED INTERVIEW. Cancellations within 48 business hours for reasons other than illness or an emergency are not acceptable and will jeopardize your recruiting privileges, as noted in the following "No Show" policy. If you must change or cancel an interview more than 48 business hours before the interview, you **must** do so directly by contacting the Caltech Career Development Center at (626) 395-6361.

No Show Policy

If you miss an interview for any unexplained reason, you will be required to write a letter of apology to the recruiter explaining your reason for missing the interview. This must be submitted to the Caltech Career Development Center (career@caltech.edu), within two business days after the missed interview, which in turn will be forwarded to the recruiter on your behalf. Failure to do so will result in a suspension of your interviewing privileges. If you incur a second unexplained "no show", your recruiting privileges will be suspended immediately. You will be required to submit a letter of apology to the recruiter and justify missing the interview to the satisfaction of the Caltech Career Development Center, before your privileges will be reinstated. A third "no show" will result in termination of your interviewing privileges for the rest of your tenure at Caltech and will not be eligible for reinstatement.

Dressing For Interviews

You represent both yourself and Caltech when participating in on-campus interviews and are expected to review the company's profile to determine whether to dress in business attire or business casual for the interview.

Resume FAQs

What is the difference between a resume and a CV?

A resume is typically used for applying to industry positions while a Curriculum Vitae (CV) is used for applying to academic positions. Beyond that, the scope of each document is different. A CV is longer and more autobiographical. A resume should be kept fairly short and is used as a marketing tool to reach potential employers. There may be times where an industry employer accepts a full CV or a potential research mentor asks for a standard resume, but usually you will keep the documents separate based on which type of position you are applying for.

How long should a resume be?

While the old rule is to keep the resume to one page, that is a rapidly changing rule in industry today. It is important to keep the document brief (the classic statistic states that employers give a resume a 10 second glance at first look), you will find that employers do prefer a fuller picture of your experience. This is especially true for graduate students and postdocs but can apply to upperclassmen as well. Some industry fields still prefer a one-page resume, however. Finance and consulting firms are notable examples. Otherwise, aim for one to two pages depending on how much relevant experience you have.

Is there a certain format or template that I should use?

Examples are included in this booklet but are by no means the only appropriate formatting for a resume. The key is to make sure the resume is formatted, readable and catches the eye of the employer. Make it easy for them to find the relevant information about your experience and technical skills. Draw their eye to key words and phrases from the job description. Don't get too fancy with formatting – it is much better to have a basic resume with information that is easy to read than to have an overly creative style that overshadows your qualifications. Just remember to be consistent with font style and size throughout the resume.

Should I include an objective or a qualification summary?

Both can be useful marketing tools if they are specific. An Objective section needs to be especially clear. Avoid vague language: "To gain a position utilizing my skills and experiences." Let the employer know what you are applying for and why. Many applicants now choose a Qualification Summary instead. This is either a paragraph or a few bullet points which highlight the relevant skills, experiences and accomplishments that the applicant wants the employer to see.

Should I list my Grade Point Average (GPA)?

Usually. However, many graduate students and postdocs choose to omit their graduate GPA. Companies tend to recognize that a graduate GPA works differently than undergraduate grades. If your undergraduate GPA is 3.0 or higher, definitely list it. Below that, it is more of a judgment call. If in doubt, leave it out.

What about Relevant Coursework?

Only list courses if you are early in an undergraduate program or have taken courses that are unique and will make you stand out as a candidate. This section is typically not necessary at all past the undergraduate level. If you are a Freshman or Sophomore and applying for internships, you can also list courses that you will be taking between the time of application and the end of the school year which may be relevant to the position or company. Don't list general education or core classes which are irrelevant, and don't list the call number for the course. An example of how to list relevant coursework:

- Econometrics
- Mathematical Finance
- Statistical Mechanics
- Stochastic Process and Modeling
- Waves and Quantum Mechanics
- Credit Risk Derivatives

Resume FAQs Continued

How knowledgeable should I be about the technical skills I list?

The general rule is to list technical skills for which you have enough familiarity to be able to use quickly and with minimal supervision. Even if your experience with that program is a few years back and you may need a quick refresher, include it if you feel it wouldn't take much time to get up to speed. Many applicants are choosing to list skills by level of proficiency: Advanced, Intermediate, Basic.

An example of skills may include:

Advanced: Matlab, PHP, SQL

Basic: C++, JAVA, STATA

What about spoken languages?

These can also be included either in the technical skills section or in a separate section of the resume, also by order of proficiency (i.e. proficient in written and spoken Hindi, fluent and English and Chinese, or basic knowledge of Spanish)

How long should the write-up for each experience be?

Remember that this is a marketing pitch. If the blocks of text are too thick, they aren't very effective. Make each bullet point short – two to three lines – and 'scannable' for key words and phrases.

Pro-Tip: Use action verbs to describe experiences (e.g. created, managed, researched, studied) and list successful outcomes wherever possible (e.g. instrumental team member responsible for developing new fuel cell technology applications).

Do I need to include every work/research experience?

Not necessarily. While it can look bad to have large gaps in work history, you will also find that later in your academic and postdoc career, it is difficult to contain all of the information even on a two page resume. Start eliminating earlier and irrelevant experiences. After your first year of college, you will exclude anything from high school, except in unique circumstances. When you're trying to make your resume more succinct and reader-friendly, you can title this section "Select Experience," which indicates to the employer that you are handpicking certain experiences to stand out, and that a more complete list is available if necessary.

How do I show quantifiable achievements for research?

Companies who recruit from Caltech know that when they recruit from here, they will be receiving applicants who often have a more stellar academic background. Many of the recruiters come from similar backgrounds and understand that measurable results can often take much longer than you are able to devote to a lab. It's okay if you don't have publications to show for every research experience, especially summer experiences. Focus on the unique contributions you made while you were there and how the project wouldn't have been the same without you.

How detailed should my list of publications and presentations be?

For graduate students and postdocs, this is one of the first sections to cut down for industry, especially as it becomes expansive. List select publications and presentations which are notable or first-author and indicate that a complete list is available upon request.

Pro-Tip: Don't include any publications or presentations more than 10 years old unless the work is seminal or often cited.

Resume FAQs Continued

What types of hobbies and interests are relevant to include?

Only include hobbies and interests which are relevant to the position, have obvious transferable skills, or are unique enough to be an ice breaker in an interview. Running, Crafting and Music are examples of hobbies that are too general to be listed. Running three full marathons over the past two years, rebuilding antique cars, playing for ten years with a symphony orchestra are examples of hobbies which may be included. These types of activities show the employer that you are well-rounded and accomplished in other areas.

Do I need to list my citizenship status on the resume?

Usually, no. However, if the employer indicates that it requires US citizenship and your background and education may indicate that you not meet the requirements, it's okay to list this with your contact information. We recommend leaving VISA status off the resume unless specifically requested. There will time to discuss that with the employer later in the interview process.

Should there be a references section?

A references section is still included on a CV but is unnecessary on the resume. An employer will ask you for a reference sheet separately if needed.

Pro-Tip: Have a one page list of references readily available so that you can submit their information electronically as soon as the hiring manager requests this.



Resume Template

Your Name

California Institute of Technology MSC 555 Pasadena, CA 91125

(626)395-6361 yourname@caltech.edu

OBJECTIVE OR QUALIFICATION SUMMARY:

Not always necessary but can help to clarify your career goals or summarize your qualifications. If writing an objective, make it specific. For example:

"To gain INSERT JOB NAME at INSERT COMPANY NAME using INSERT SPECIFIC SKILLS."

A qualification summary is either a paragraph or a few bullet points which highlight the key highlights from your experience and skills that you want an employer to remember. These will be elaborated upon in the text of the resume.

EDUCATION:

Degree Name and Field of Study (Reverse Chronological Order)

(expected) June 2020

California Institute of Technology, Pasadena CA

GPA (not necessary, but typically list when above 3.0)

- Can also include relevant coursework (if unique or if you lack relevant work/research experience)
- Honors, Scholarships, Dissertation, Thesis etc. can be included here or in a separate section

TECHNICAL SKILLS:

A quick list of industry/job specific skills. Use job descriptions to match what employers are seeking. These can be categorized by type of skill or by level of competence.

Example: Programming Languages: Matlab, Python (advanced), C, C++ (intermediate), Java (Basic)

RELATED EXPERIENCE:

A summary of the work, research, and volunteer experiences which are most relevant to the employer. This can also include relevant and unique coursework. Always list in reverse chronological order.

Position Title Dates

Firm Name, City/State

- Description of experience that will be relevant to the employer don't get too detailed about the technical nature of projects. Pick the aspects that will interest the employer.
- Show accomplishments. How was your individual contribution valuable to the employer?
- Highlight aspects that are unique or quantifiable

ADDITIONAL EXPERIENCE:

Position Title Dates

Firm Name, City/State

• List any experiences that are an important part of your professional development but not directly related to the position.

Resume Template Continued

Your Name (make sure to include header on second page)

TEACHING EXPERIENCE:

Position Title Dates

Firm Name, City/State

Omit excessive detail unless there are aspects which are unique or you have metrics for success

PROFESSIONAL ASSOCIATIONS

Association, Title (if applicable)	Dates
Association, Title (if applicable)	Dates
Association, Title (if applicable)	Dates

HONORS AND AWARDS (only use bullets if there is more than one honor/award)

Title of Award Dates

Relevant information (as applicable)

SELECT PUBLICATIONS AND PRESENTATIONS (Reverse Chronological Order)

No need to include a full list, especially if it's extensive. Focus on notable publications and presentations, or first author papers.

HOBBIES AND INTERESTS (only use bullets if there is more than one hobby or interest)

Not necessary to include unless there are transferable skills involved or unique talking points for an Interview.

LANGUAGES

Fluent in Mandarin, Proficient in written Cantonese, and basic knowledge of Wu.

MATTHEW W. CHIANG

1200 E. California Blvd., MC 123-45, Pasadena, California 91125 matthew.w.chiang@caltech.edu (626)395-xxxx

Education

California Institute of Technology (Caltech), U.S.A

Expected Jan 20XX

Master of Science Electrical Engineering GPA 4.3

University College London (University of London), U.K.

BEng – Electronic and Electrical Engineering First Class Honours (Dean's List), GPA 3.79

June 20XX

Work Experience

CSOP Asset Management Ltd. Hong Kong

Summer Analyst

July 20XX – Aug 20XX

- Conducted research to support portfolio management and assisted in creating sales materials
- Compiled reports on analysis of revenue growth for securities in HKSE, NYSE, Nasdaq, Shanghai SE
- and Shenzhen SE
- Conducted research on China Sector ETFs /Style ETFs and presented on how constituents are chosen and listed
- Contributed in identifying potential imminent plunge in Chinese Equity market at the beginning of Aug 20XX (stock market declined more than 20% thereafter in August)

Excel Technology International Holding Ltd. Hong Kong

July 20XX

- Summer Intern
 - The company provides IT solutions to major banks and financial institutions
 - Improved marketing materials (PowerPoint presentations and booklets)
 - Created internal training material on loan related calculation used in Loan Management System
 - Assisted in user interface design and converting Loan Management System from VB based to web based (JSP, Ajax)

Ningbo Naite Magnesium Tech Co. Ltd. China

Sept 20XX - April 20XX

Assistant Sales and Production Manager

- The company manufactures magnesium alloy products, located in Ningbo, China
- Assisted in reorganizing manufacturing process and internal management structure
- Designed the online management system
- Established partnerships with several Canadian companies to expand the market in North America

Leadership and Other Activities

- Chairman (Operation and Finance) of the Organizing Committee for the inaugural Asian-Pacific American Business Summit in Beijing July 20XX
- Quarterfinalist of NYU Stern's Entrepreneurs Challenge Social Competition
- Co-founder of Invuture, a student organization that promotes entrepreneurship in China, the team organized first GSVC China Business Competition
- Caltech Graduate Student Council Board Member, Electrical Engineering Director at Large
- Vice President of ABACUS (the inter-college society for Chinese students)
- Captain of ABACUS basketball team
- Student Representative for Electrical Engineering students Class 20XX at UCL
- Member of the Institution of Engineering and Technology (The IET)

Technical Skills Excel at Matlab, PHP, SQL, CSS/HTML, Flash/Action Script, MS Excel, PowerPoint

Knowledge of C++, JAVA, Bloomberg Terminal, Adobe Photoshop

Language Skills Fluent in English and Chinese

Rebecca G. Abraham

Caltech, MSC 112, Pasadena, CA 91126 Phone: (626) 395-xxxx Email: rgabraham@caltech.edu

EDUCATION

California Institute of Technology, Pasadena, CA B.S. in Applied and Computational Mathematics

Cumulative GPA: 3.5 GPA In-Major: 3.7

Quantitative Work: Differential Equations

Linear Algebra
Introduction to Finance
Credit Risk Derivatives*
Mathematical Finance*

Probability and Statistics
Discrete Mathematics Options
Econometrics
Statistical Mechanics
Stochastic Processed and
Modeling

Fundamentals of Complex Analysis Partial Differential Equations Waves and Quantum Mechanics Nonlinear Differential Equations

WORK EXPERIENCE

Western Asset Management Company, Pasadena, CA Analyst Intern

Summer 20XX

June 20XX

- Worked with the Structured Products Group in improving a model used to analyze Loss Severity on certain deals
- Worked on a Rent vs. Buy model used to analyze when bottoming out of home prices will occur
- Shadowed Analysts in the group in various day-to-day activities

Caltech, Seinfeld Lab, Pasadena, CA

Summer 20XX

Summer Undergraduate Research Fellow (SURF)

Studied Secondary Organic Aerosol Formation from Low Molecular Weight Organic Compounds

A Department of Energy (DOE) funded project to investigate and quantify the conditions that cause natural aerosol formation, and how they may affect climate

Caltech, Haile Lab, Pasadena, CA

Summer 20XX

Summer Research Assistant

- Worked on developing 101-oriented Thin Lanthanum Nickelate Ferroelectric Films to be coated on Silicon Electrodes
- Studied the effects of various parameters such as Reaction Mixture Composition, Coating Time and Rotational Speed,
 Furnace Temperature and Duration of Calcination, on the structural stability and conductivity of the Lanthanum
 Nickelate coated silicon electrodes

Caltech, Research Science Institute, Murray Group, Pasadena, CA

Summer 20XX

Summer Research Assistant

- Selected as one of 35 international and 70 American students by the Center for Excellence in Education (CEE), Vienna, to attend a six week research program at either MIT or Caltech
- Worked on the obstacle detection capabilities of the autonomous vehicle, Bob, for the 20XX Grand Challenge funded by the Defense Advanced Research Projects Agency (DARPA)

ACTIVITIES AND COMMUNITY SERVICE

- Member of the Caltech Y Executive Committee since January 20XX, and participated in various Leadership, Awareness and Community Service Activities organized by it, both on and off campus
- Business Manager for the Caltech Student Newspaper and member of a faculty led Financial Aid Committee, elected Social Chairman of Fleming House 20XX-20XX

ADDITIONAL SKILLS

- Proficient with Microsoft Word, Excel, PowerPoint, Visual Basic
- Familiar with Mathematica, MATLAB and STATA
- Proficient in written and spoken Hindi, and basic knowledge of French

HUONG (LUCY) YANG

1200 E California Pasadena CA 91125 626.937.2222 | huyang@caltech.edu

EDUCATION

California Institute of Technology (Caltech)

Bachelor of Science, Engineering Science, emphasis in Mechanics, May 2015

GPA: 3.60

Relevant Coursework: Engineering Design Clinic, Simulation and Modeling, Signals and Systems, Technological Risk Assessment, Statistics for Engineers, Mechanical Vibrations, Failure Analysis, Introduction to Hydrosystems Engineering

SKILLS

Technical: MATLAB, Minitab, Neural Networks, ARIMA modeling, familiar with C programming and AutoCAD Languages: Fluent Spanish; Conversational Portuguese

EXPERIENCE

Engineering Design Clinic SURF, Caltech

Sept 2014 - May 2015

Dabney Lab, Pasadena, CA

- · Researched current Lean Design practices in engineering industries
- Worked with 3 Design Clinic team members to analyze design processes, identify inefficiencies and recommended improvements based on Lean Design principles
- Co-managed \$5,000 project budget, ensured all project deliverables were completed on-time
- Collaborated extensively with Kollmorgen employees and management
- Developed and presented project deliverables and final recommendations to project sponsor staff

Caltech Baxter Engineering Program - Research Intern (June 2013 - May 2014)

- Developed workshop for middle and high school teachers to teach about engineering design and ways to apply in
 engineering principles in classrooms
- Developed engineering activities for inclusion in novel to introduce engineering concepts to students grades 7-12
- Co-authored ASEE conference paper and poster

Engineering Laboratory of Dr. Jack Jones, Caltech - Teaching Assistant (Sept 2012 - May 2013)

- Prepared materials for professor and students for use in lab sessions
- Assisted professor in answering questions and resolving issues during the laboratory

Curriculum Planning Committee, Caltech – Student Member (Sept 2012 - May 2013)

- Organized logistics for and participated in meetings with faculty
- Served as liaison between committee and student body

ACTIVITIES AND LEADERSHIP

Society of Women Engineers (SWE) — Caltech Student Chapter (2013 - present) Co-President (2014 - 2015); Vice President & Technology Director (2013 - 2014)

- Served as liaison between Smith College faculty and administrators and SWE chapter members
- Applied for grant and Student Government Association funding
- Planned engineering outreach events

Engineering World Health - Caltech Student Chapter (2013 - 2014) Vice-

President

Aided with chartering of Caltech chapter

Abigail Berns

818.747.4774 • abby.berns@gmail.com

Education

Caltech, Pasadena, CA

Bachelor of Arts in Biological Sciences GPA: 3.8/4.0 Honors: Awarded STRIDE research scholarship with Dr. Steven Jackson June 2014

King's College London, School of Biomedical and Health Sciences, 1/2013-6/2013 Junior Semester Abroad

Research / Laboratory Experience

Research Fellow, Laboratory of Parasitic Diseases National Institute of Allergy and Infectious Disease, NIH, Bethesda, MD

8/2014-present

- Recipient of Intramural Research Training Award
- Manage care and treatment of 40 rats, including injection and assistance during MRI
- Quantitative analysis of experimental data
- Develop rat infection model for Taenia crassicens.
- Perform steriotaxic neurosurgery on rats to implant Taenia crassiceps metacestodes.
- Design and present academic and experimental results

Research Assistant, SURF Biology Department, Caltech

5/2012-12/2012

- Developed test to quantify biofilm formation of UTI-causing E. coli
- Trained and supervised first year research student

Community Health Experience

Intern, Communicable Disease Control Division, Boston Public Health Commission 6/2014-8/2014

- Adjusted state response survey to meet cultural needs of specific immigrant community during epidemiological investigation of an outbreak of foodborne illness
- Interacted with wide range of multi-ethnic, low-income patients while performing intake at free tuberculosis clinic
- · Researched and created fact sheets for general public on pandemic influenza in infants and children
- Developed focus group oral questionnaire and written survey on community health practices surrounding pandemic flu

Intern, Clinical Serology Lab, Strong Memorial Hospital, Rochester, NY 6/2013-8/2013

- Handled HIV-positive sera, confirming accuracy of rapid HIV kits
- · Tracked confidential patient records for a New York State HIV study

Publication

White, C. A. L. Berns, and S. Smith 2013. Low temperature (15 °C) increases expression of biofilm-, cold-shockand RpoS-dependent genes in Escherichia coli. Microbiology; 150: 130-142.

Leadership Experience

Co-Chair/Religious Co-Chair, Caltech Hillel 9/2012-5/2014

 Conducted weekly meetings, delegated board member responsibilities, coordinated communications, organized guest speakers and holiday events for 200 people

JACOB JACKSON

(413) 244-1321 Jjackson@gmail.com

EDUCATION

California Institute of Technology, Pasadena, CA

Bachelor of Arts expected June

2018 Anticipated Major: Geophysics

Springfield High School of Science and Technology, Springfield, MA

Graduated June 2014

SKILLS

GPS: Trimble mapping grade receivers (GEO XM), Trimble Pathfinder Office

COMPUTER: KaleidaGraph, Stata, Microsoft Office

LANGUAGE: Conversational Spanish

RELEVANT EXPERIENCE

Caltech, Pasadena, CA

Assistant, Spatial Analysis Lab

2013-present

- Produce professional-quality digital maps of Smith College campus infrastructure.
- Help lab staff train students in digital map production, spatial analysis, spatial database generation, and GPS field data collection.
- Develop and produce print training manuals and video guides for GIS and GPS users.

Pioneer Valley Project, Springfield, MA

Outreach Worker, Healthy Nail Salon Project

2011-present

- Invited to continue work on EPA-funded project after exceeding high school internship expectations.
- Develop and improve outreach and training materials on hazardous nail care products.

Baystate Medical Center, Pasadena, CA

Research Assistant

Jan.-Aug. 2013

- Compiled, geocoded, and analyzed databases for child obesity research.
- Updated and edited Excel database and socio-demographic data layers.

Center for Sustainable Development Studies, Atenas, Costa Rica

Study Abroad Student

June-July 2012

- Digitized hand-drawn and produced digital land-use/land-cover maps for Costa Rican national and municipal governments with use of GPS and field assessment.
- Assessed biodiversity conservation and land management policies and realities in Costa Rica.

LEADERSHIP EXPERIENCE

Pioneer Valley Youth Society, Springfield, MA

President, June 2012-May 2013 Youth Leader, Sept. 2009-May 2011

- Oversaw activities and communications of 100-members chapter of international organization.
- Mentored inner-city youth aged 7-18.

Sample Graduate Student Resume

Henry David

Hdavid@caltech.edu • (626) 123-4567 • linkedin.com/in/Henry-David

Education:

California Institute of Technology

Sept. 2014 - May 2019 (expected)

Chemistry PhD

Yale University

Sept. 2010 – May 2014

• B.S. in Biochemistry and Molecular Biology, GPA 3.8/4.0

Research Experience:

California Institute of Technology, PhD Candidate, Dougherty Lab

Jan. 2015 - Present

- Investigated the activation mechanism of a ligand-gated ion channel
- Probed protein-protein interactions of a nuclear hormone receptor
- Independently generated new ideas and planned experimental approaches
- Communicated and collaborated with other lab members and principal investigator
- Experience troubleshooting vital laboratory equipment with no technical support
- Skilled with PCR, bacterial and mammalian cell culture, gel electrophoresis, Western blotting, subcloning, heterologous protein expression, structure-function studies, electrophysiological recording, FPLC purification, MALDI MS

The Willow Research Institute, Research Intern, Krishna Lab

June 2013 - Aug. 2013

- Developed synthetic strategy for a nucleotide analog as a monomer subunit for a plausibly prebiotic artificial informational polymer
- Performed organic synthesis, purification, and spectroscopic characterization

Yale University, Undergraduate Research, Bevelle Lab

June 2012 - May 2013

- Characterized catalytic activity of a novel organometallic complex
- Utilized inorganic synthesis, glove box and Shlenck line techniques, GCMS, NMR
- Data was used in a grant application for research into sustainable light-metal catalysts

Teaching / Leadership:

California Institute of Technology, Research Mentor

Sept. 2016 - April 2018

- Guided three first-year graduate students in techniques of chemical biology
- Planned research strategies and oversaw project implementation

California Institute of Technology, Teaching Assistant

Sept. 2014 - Mar. 2017

- Assisted professors in course development and instruction
- Helped to restructure an advanced organic chemistry course to be less lecture centric
- Courses include Advanced Organic Chemistry, Introductory Biochemistry, General Chemistry

Yale University, Teaching Assistant (Organic Chemistry)

Sept. 2012 - Dec. 2012

• Created novel problem sets and coordinated recitation for chemistry students

Publications:

David, H.; Rye, D. A.; Hermione, S. C. R. Biochemistry 2018, 57 (27), 9427–4043.

David, H.; Dougherty, D. A. J. Biol. Chem. 2018, 265 (8), 2593–2914.

Sample Graduate Student Resume 2

PAMELA CHENG

Pasadena, CA 91106 • <u>Poleary@caltech.edu</u> • 123-456-0781 http://www.linkedin.com/in/pamoleary

EDUCATION

California Institute of Technology

PhD, Department of Chemistry, GPA: 3.7/4.0

Pasadena, CA Expected June

Relevant Coursework: Biochemistry of Macromolecules, Neurobiology, Bioorganic Chemistry of Proteins, Biology of Cancer, Macromolecular Machines, Enzymology, Responsible Conduct of Research, Programming for the Biological Sciences Bootcamp (Python)

Massachusetts Institute of Technology

Cambridge, MA

B.S. Departments of Chemistry and Chemical Engineering, Minor Biology, GPA: 4.5/5.0 June 2012 Relevant Coursework: Biochemistry I, II and Lab, Organic Chemistry I, II, Advanced and Lab, Chemical and Biological Reaction Engineering, Thermodynamics and Kinetics, Genetics, Biology of Bacteria, Neuroscience and Society

RESEARCH EXPERIENCE

ACADEMIC

Caltech Department of Chemistry, Graduate Researcher Advisor: Dr. Dwayne Smith

Pasadena, CA

Nov. 2016-Present

- Characterizing biocatalyzed carbon-carbon bond formation mechanisms for industrial synthesis
 applications using metalloenzyme nitrogenase with representative substrate methyl isonitrile.
- Developed understanding of structural biology strategies at the West Coast Protein Crystallography Workshop. <u>Advisor</u>: Dr. Cindy Chen Dec. 2012-Oct 2016
- Characterized structure-function relationship of plant-derived membrane protein chaperone cpSRP43 capable of preventing aggregation of amyloid-beta (Aβ40) peptides found in Alzheimer's.
- Used cpSRP43 as a co-expression chaperone in E. coli to increase expression of membrane proteins, which are often very challenging to study because of their low expression.
- Trained two undergraduate researchers and two high school researchers to clone, express, purify, and characterize cpSRP43 mutants, resulting in co-authorship of these researchers on multiple publications.
- Membrane protein chaperone research secured a National Institutes of Health R01 grant of approximately \$1 million.
- Published work in PNAS; submitted a second manuscript to JBC; third manuscript is in preparation.

MIT Department of Organic Chemistry, Undergraduate Researcher Advisor: Dr. Timothy Keets

Cambridge, MA

Sept. 2010-May 2012

- Developed palladium-catalyzed carbon-nitrogen cross-coupling methodologies for the synthesis of drug-like molecules using amidine salts with aryl halides as well as amides with ortho-substituted aryl iodides.
- Applied these methodologies to perform one-pot synthesis of pharmaceutically useful quinazoline derivatives.
- Published work in Organic Letters and presented a poster at the MIT Chemistry Research Symposium.

MIT Department of Biological Chemical Engineering, Undergraduate Researcher Advisor: Dr. Jack Fiend

Cambridge, MA Feb. - May 2012

 Increased biofuel yield from sorghum flour hydrolysis by 300% through optimization of heating apparatus, mixing impeller type, temperature, and reaction time.

 Presented poster at the Society for Industrial Microbiology and Biotechnology Conference in Washington DC.

SAMPLE GRADUATE STUDENT RESUME 2 CONTINUED

INDUSTRIAL

Amgen Idec

Cambridge, MA

Intern, Protein Formulation

Jun. - Aug. 2012

- Studied whether secondary structure analysis via FTIR could be utilized for monitoring Factor IX Fc (hemophilia drug candidate) protein damage under various stress conditions to ensure drug stability during shipping.
- Presented research poster at Biogen Idec Intern Poster Session and via PowerPoint presentation to lab group.

Merch & Co.

Rahway, NJ Intern, Process Chemistry

Jun. - Aug. 2011

- Developed one-pot Negishi cross-coupling methodology for C-C bond formation between crude thiazole zinc chloride mixture and various aryl bromides using RuPhos precatalyst with yield of 55-99%
- Synthesized trisubstituted olefins via cross-coupling with yields of 55-74%.
- Presented research poster at Merck Intern Symposium.

Pfizer Pharmaceuticals

Groton, CT

Intern, Research API and Research Analytics

Jun. - Aug. 2010

- Performed two-step reductive amination reactions toward the synthesis of an ophthalmology target in order to study the effect of substrate electron density on reaction time using online FTIR and Raman spectroscopy to monitor reaction kinetics.
- Confirmed product formation via UPLC-MS and NMR and established standard operating procedures for using online spectroscopy tools for real time reaction monitoring.
- Presented research poster at Pfizer Intern Symposium; poster was also presented at Pfizer Global RA Symposium and GPC Forum; presented PowerPoint presentation to lab group.

TEACHING EXPERIENCE

Pasadena, CA

Caltech Department of Chemistry
Pasadena, CA
Biochemistry (2013, 2015, 2016), Biophysical Chemistry (2013, 2014, 2015), General Chemistry (2013), Chemistry Lab (2012)

- Organized weekly recitations and weekly office hours, prepared problem set and exam questions, graded assignments.
- Received an outstanding teaching assistant (TA) award for biochemistry instruction.

TECHNICAL SKILLS

Experimental: Biology: Bacterial Cloning, PCR, Miniprep, Gel electrophoresis (agarose, SDS-PAGE), Bacterial Cell Culture (E. Coli and Azotobacter vinelandii), Protein Purification (soluble proteins, membrane proteins, anaerobic proteins), FPLC (AKTA and Bio-Rad), Dialysis, Lyophilization, Western Blot, EPR, NEM Alkylation, Fluorescence Anisotropy, Kinetic Light Scattering Assay, CD, Optical Microscopy.

> Chemistry: FTIR (KBr pellet, BioCell, ReactIR), UV-Vis Spectroscopy, NMR (Varian, Bruker), GC, HPLC, LC-MS, TLC, Flash Column Chromatography, Biotage, Glovebox

Computational: Microsoft Office, ChemBioDraw, Matlab, PyMOL, KaleidaGraph, Inkscape, HDX. Workbench.

Build Your Bullet Points for Your Resume

•	'n	•	2.	•	ij	Now I	• Ri P	Example 2	• D	Example 1	What di (Your dut projects)
						Now It's your turn:	Prepared and presented weekly I Rate Swap desk.	Participated in client meetings	Developed more efficient, time saving lab protocol to better su 10% cost savings and FDA beta trial 30 days ahead of schedule	Supported pharma drug beta test	What did you DO? (Your duties, responsibilities, projects)
							PowerPoint presentations highlighting in	Used Technical Presentation skills	aving lab protocol to better support Alzhial 30 days ahead of schedule.	Developed a new lab protocol	HOW did you do it? (Specific tools, resources, or technology; transferrable skills)
							Prepared and presented weekly PowerPoint presentations highlighting interest rate movement in major international markets to traders on Interest Rate Swap desk.	Met weekly with traders on Interest Rate Swap desk. Presented on the interest rate movement in major international markets.	Developed more efficient, time saving lab protocol to better support Alzheimer's vaccination trial testing to save 1,200 hours of lab work, resulting in 10% cost savings and FDA beta trial 30 days ahead of schedule.		ELABORATE with details. (How often? What was the purpose? Who else was involved? How many? Use #'s when possible.)
							al markets to traders on Interest		200 hours of lab work, resulting in	Increased average Lab productivity and reduced costs by 10%	What were the RESULTS? (What did you accomplish or improve? Did you create something new? Use #'s when possible)

Cover Letter Template

Your Name (Use the same Header as your resume) California Institute of Technology MSC 555 Pasadena, CA 91125

(626)395-6361 your name@caltech.edu

September 17, 2019

Employer's Name Employer's Title Company Name Company Address

Dear "Name of Recruiter" (or Dear "XYZ Company Name Hiring Team" if unknown),

Use the opening paragraph to introduce yourself, including your major, expected graduation date, the position for which you are applying and where you heard about the position. If you have been referred to this company and/or contacted by someone, drop their name here as well. Express the reasons you are interested in this position, as well as this company.

Pro-Tip: Review their website, social media in order to determine company culture. Match your interests to the work they do, this should change for each company.

The next paragraph (or two) is your primary sales pitch. Change as much of this section as possible to fit the company and position. Don't simply copy and paste from your resume. Rather, describe highlights of your education, internship, or background experience that best match skills and qualifications needed for the position (as listed in the job description). Pick strengths and experiences which will be valued by the employer and demonstrate your career path. Be persuasive and show excitement. Keep it brief — Instead of telling stories, highlight achievements. Keep them interested in inviting you for an interview to talk about these achievements in greater detail. The entire cover letter should not be more than one page.

The final paragraph is your space to ask for an interview. Conclude by reiterating your interest in the position and your desire to talk with them further. State how and when you plan to follow up with them and close with gratitude.

Sii	nce	re	l۷,

Your Name

Sample Internship Cover Letter

Calvin Techer (Use same header as resume) California Institute of Technology MSC 555 Pasadena, CA 91125

(626) 395-6361 caltecher@caltech.edu

December 1, 20XX

Finance Internship Program Walt Disney Studios 500 South Buena Vista Street Burbank, CA 91521 Pasadena, CA 91125

Dear Disney Internship Team,

I would like to be considered for the Walt Disney finance internship program posted on Caltech's Handshake website. I am currently a junior and majoring in Business Economics with a minor in Mathematics at California Institute of Technology. My academic integrity and work experience have given me the essential skills to excel as a member of your team.

My interest in corporate finance started last year when I had the opportunity to volunteer with the City of Los Angeles in their partnership with a management investment firm to structure financing for a revitalization project. My coursework in economics, finance, and management has helped me develop strong quantitative and analytical skills required for this internship opportunity.

Disney's summer program provides a great opportunity for me to apply my communication, organizational, creative, and quantitative skills in a collaborative and interactive environment. For the past two years I have worked as a student assistant for a microeconomics professor. This position requires organization, effective communication, and technical skills, as I am responsible for interfacing with prominent alumni and professionals. Having such an important role, I have truly learned how to effectively manage my time to balance my work, school, and leadership commitments. This position has provided me with an opportunity to develop strong communication and computer skills from using programs like Excel and PowerPoint in addition to learning how to prioritize tasks to ensure all projects are completed in a timely manner.

I believe that I will provide an immediate benefit to the Finance team at Disney because I am a dedicated and determined individual. Thank you for your time and consideration, I look forward to scheduling an interview where I can talk more about my interests and qualifications.

Sincerel	у,
----------	----

Cal Techer

Interview Thank You Letter

(*this can also be an email instead of a formal document)

Calvin Techer

California Institute of Technology MSC 555 Pasadena, CA 91125

(626) 395-6361 caltecher@caltech.edu

December 12, 20XX

Dr. Fine Mann Project Manager Ohm R . Simson Inc. 10 Upping Street Pasadena, CA 91125

Dear Dr. Mann,

In the first paragraph explain that you enjoyed meeting with them (and others in their organization if appropriate). Remind the interviewer of the position that you interviewed for, the date you met, and express your appreciation for their time and consideration. If you are NOT interested in the position, do not share this with them. Just explain that you enjoyed meeting with them and learning about their company, and that you hope you will see them again in the future.

If you ARE interested in the job...in the second paragraph reinforce your interest. Let them know specifically what was particularly interesting to you about the job and/or organization. You can reemphasize what a good fit the job/organization would be between your strengths and future goals. You might remind them of something that was said in the interview that was particularly striking, and how that increased your interest in the company, and that you are even more interested in pursuing this career. If you want, you can mention how the company's culture, people, values, etc., align with yours. It is OK to be personable and friendly while maintaining professionalism.

In this closing paragraph, reiterate your interest in the position. Offer an opportunity for them to clarify any questions or supplemental information. Finally, express appreciation for the interview and provide your contact information. If they mentioned a next step (for instance, an in-house interview, or you send them recommendations, etc.) and date, confirm that now, and explain that you look forward to the next step in the process.

Sincerely	,
-----------	---

Cal Techer

Your Social Media Presence

We all have a digital footprint on social media. Think about yours - where might an employer find information about you? Over the last decade and a half, recruiters have used the Internet to find out more in-depth information about candidates. Did you know that approximately 51% of organizations and companies search candidates on Google as part of the vetting process? According to a Microsoft survey, close to 80% of employers conduct searches of candidates online to determine if their social media presence is clean. This is in addition to checking references offline.

How Does this Impact Me?

Before you apply for a job, check out your online footprint. Google yourself to see what appears. Is your name listed on the first page or other pages? What information is associated with your name? Are there photos of you? This information is crucial to know so that you can get your social media presence in line with the image you want to portray.

Next you should search your name on all of the social media accounts you have created, whether they are currently active or not. This information will also alert potential employers to your online etiquette and more about your personality. Unless your accounts are completely locked down, anyone can access them as well as a history of the type of information you share or post. If you were in a hiring manager's position, would you hire yourself based on what you viewed online? If the answer is no, you should start re-branding your image through your content, photos, and links.

How Do I Manage My Social Media for Job Searches?

Go through your posts and delete any material, photos, videos, and links that you wouldn't want a boss or professor to see. If someone has tagged you in a questionable post, remove your name from the post. A good rule of thumb is not to post anything online that you wouldn't say to a professional colleague at a networking event or at an interview.

Listed below are potential social media landmines that you want to avoid:

- Political posts, whether opinion or fact-based
- Foul language or derogatory comments
- Grammatically incorrect posts or typos
- Any text that could be considered discriminatory
- Suggestive photos or videos
- Rude or inappropriate gestures

The best way to prevent employers from seeing unflattering posts is to lock down your Facebook, Twitter, Instagram, YouTube, Tumblr, Snapchat, Flickr, LinkedIn or any other pages. Change the settings in these applications to private so that the general public cannot review personal information that might prevent you from getting a job.

If you are planning to keep your social media profiles public, your posts moving forward should remain positive. An example of an acceptable post is a headline from the Caltech website highlighting important research or a new discovery. Sharing this post will show employers that you are in touch with current events in the science industry.

Pro-Tip: Follow companies of interest and reputable industry organizations on LinkedIn. This shows that you are interested in the company as well as professional development and learning.

Preparing for an Interview

Before the Interview

• **Do your research** – The best way to go into an interview with confidence is to be well prepared. Review the job description to find specific keywords that match your skillset, interests, and background. Research the company's website, news articles about the company, press releases, and any other information that shows you have done your homework.

Pro-Tip: A good way to find more detailed information about a company is to review their annual re port, which is often located on their website. Look for any LinkedIn connections that may work at this company and reach out to them for an informational interview. Ask them more about the company and their position.

- Understand the Who, What and Why Make sure you are able to articulate what you think the job entails. Many interviewers will ask you to summarize your understanding of the position at the beginning of the interview to assess your knowledge and interest in the position. Be able to share specific reasons that you want to be part of this company and work in this position. Do their core values align with yours? Are you interested in their history and growth plans? Do you admire their Founder, CEO, and/or C-Suite Executives? If so, be prepared to discuss the who or what or their company and why they should hire you.
- **Prepare specific answers** Review your resume and be ready to talk about your jobs, education as well as any components of your application. Employers don't want you to regurgitate your resume but instead prefer that you elaborate on certain experiences that describe how you fit the needs of the company.
- Practice –Review lists of commonly asked questions and prepare stories and examples that highlight your
 qualifications. If there is a technical component to the interview, brush up on the necessary skills. Make an
 appointment with the Career Development Center to schedule mock interviews in advance. We are prepared
 to help with standard/behavioral interviews, graduate and professional school interviews, and consulting case
 interviews.

Pro-Tip: The Career Development Center has an extensive library with interview resources, for students pursuing not only traditional careers in science but also quant, consulting case interviews, startup questions and more.

• Model the Image you Want to Portray - While it is not always necessary to dress in full formal interview attire (e.g. suit, pants or dress and jacket) for every position or industry, appearances are critical to a good first impression. Even if the employer has told you in advance that it is okay to dress casually, think "business casual." A general rule is to always dress at least one step up from what you will be wearing on the job. For example, if the interviewer and/or team members are dressed in jeans, don't wear jeans to the interview. You do not need to spend a lot of money to make a good impression. A good interview wardrobe can be purchased/obtained on a tight budget, but make sure to pay attention to small details. Your shoes should be shined or polished, your hair must be neatly groomed, nails trimmed, and make-up and jewelry kept minimal. Maintain a look on the conservative side when choosing colors and patterns. Also, maintain good posture throughout the interview.

Pro-Tip: Turn your phone off before your arrive at the interview location and keep it hidden throughout your time with the interviewer.

• Be punctual - Plan to arrive at least ten to fifteen minutes before your scheduled interview time. This built in time will allow you the opportunity to relax, check in, and make any last preparations before the interview begins. If you haven't been to the interview location before the actual interview, identify the location at least

Preparing for an Interview Continued

a day in advance so that you won't be distracted with directions or timing on the day of the interview. If you are driving, check your GPS to determine the time it will take to get to the interview location the day before at the same time. Don't take a chance with Southern California traffic.

During an Interview

- Pay attention to body language Start with a firm handshake, and repeat the name of the interviewer when you meet them (i.e. "It's great to meet you _____") so that you can remember to use their name throughout and at the end of the interview. Monitor your posture, gesticulations and maintain eye contact throughout the interview. Try to keep from fidgeting (a mock interview will help to identify if there are ways you fidget when nervous). Smile and show that you are excited about the opportunity to interview for this position.
- Show excitement and interest Make it clear that you are listening and interested when the interviewer is talking. Make it obvious that you are not just interviewing to get into the company, but that you believe this position is a mutually beneficial match for you and the employer. Even if you are unsure about fit, don't reveal this in the interview.
- **Keep your answers concise** Don't ramble! Think about what types of skills (direct or transferable) they are trying to elicit through each question and focus your answers to demonstrate those skills.
- Ask questions An interview is a two-way process. Take the opportunity to ask questions that will help you determine if this position is a good match for you. Don't ask questions that can be easily found on the company website. Good questions to ask include:
 - ⇒ What is a typical day on the job like?
 - ⇒ What would be expected of me during the first months on the job?
 - ⇒ How do you measure employee success?
 - ⇒ Who would I be working with?
 - ⇒ What opportunities for advancement exist?
 - ⇒ What does the interviewer like about working in this team/company?
 - ⇒ What are the most important traits the interviewer is looking for in a candidate?

After an Interview

- **Find out how to follow up** If the information is not offered directly, do not leave the interview room without finding out what the next steps will be. Will there be more interviews? When do they expect to make a decision? Reiterate your interest in the position and thank them for their time.
- Follow up Send a thank you note soon after the interview, when possible. E-mail is completely acceptable. If they have given you a business card or other contact information, follow up in a timely manner to inquire about the status of the position. In the body of the email, show that you listened during the interview by sharing something you learned about the company.
- **Keep a record of interviews** Journal your thoughts about the interview as soon as possible. . What went well? What answers need more work? What would you like to emphasize more in future interviews?
- Don't get discouraged Everyone has bad interview days. Don't let them define you pick up and prepare for the next opportunity. It can be especially discouraging to be rejected for a job you felt was a perfect match for you. Know that many times there are other factors at play in the hiring process: salary and budget issues, internal candidates, etc. Your goal is just to present the best version of yourself. The right opportunity will come along. Come visit the Career Development Center to discuss ways to find more opportunities or to polish your interview skills!

Most Common Interview Questions & Answers

Every interview is different but there are a set of common questions asked by almost 100% of hiring managers.

Listed below is a list of the top interview questions across all industries.

1. Tell me more about yourself.

This is the most common opening question asked in a job interview. Variations of the question include "Walk me through your resume," and "Tell me why you're interested in this position." Regardless of how the question is phrased, the hiring manager/team is looking for two things. First, they want a high level narrative about your background, education and work experience. They most likely have your resume and want to know how each piece of

Pro-Tip: Practice answering this question before the interview and time yourself. Your answer should be no longer than 2 minutes.

the resume fits together. Second, they want to know how you carry yourself through your body language, including eye contact, posture, hand gestures, facial expressions. Be yourself, but be the best version of yourself. Don't provide too much detail. This is not the time to talk about your childhood. Your answer to this question may be longer than subsequent answers, and often is the starting point for all future questions. Show passion, direction, and motivation. First impressions matter!

2. Where did you hear about this position?

This is a very direct question and should be answered honestly. If you have connections that work at the company, definitely mention their name and position. Or, if you heard about the position/company from an alumni or LinkedIn connection, mention this. If you found this position on a job website, make sure to convey your interest upon reviewing the job description and researching the company. You don't want to make it appear that this is just one of multiple jobs you applied for, but instead express your excitement for this company.

3. Why do you want to work here?

This is the time to show that you have done your homework and researched the company. Your answer should include facts & information you have gathered about their products or services and how your qualifications are match for the position. Think about the opportunities that this position/company may offer you that are not available elsewhere. You should also refer to mission statement and values that align with your core values. Hiring managers and interviewers appreciate candidates that understand the culture, as they are most likely to be a fit for a company.

4. Why should we hire you? OR What sets you apart from other candidates?

Many applicants tend to repeat the ways they meet the job description or repeat their strengths. Try to answer with aspects of your background and experience that go beyond the job description. Differentiate yourself and talk about any specialty knowledge, goals, and passion for the field/position.

5. Tell me about a time when you had a problem or challenge and how did you resolve it?

This is a behavioral question and your answer should reflect the following SOAR method. What was the Situation or Obstacle, what Actions did you take, and what was the Result. Be as specific and outcome oriented as possible. If things didn't end up the way you wanted, share what you learned.

6. What are your main strengths?

Highlight the technical and personality strengths required in the job description (analytical and organized thinker, independent, thrive in a fast paced environment, entrepreneurial spirt, etc). Always give examples. Anyone can be an effective team player. Can you tell a story that demonstrates a time when you've been part of a productive team?

Most Common Interviews Questions & Answers Continued

7. What your weaknesses?

This is a tricky question but doesn't need to be a stumbling block in your interview prep. If your answer is along the lines of "I work too hard", employers will be turned off. Keep in mind that the employee cares less about the actual weakness and more about you have handled it. Pick a trait that you identify as needing improvement and talk about your plan to improve or overcome it.

8. How would a professor or colleague describe you?

The best way to prepare for this is to ask friends/co-workers/profs/bosses. Obviously, you should accentuate the positive and leave out any negative feedback.

9. **Tell me about a time that you failed. What did you learn from the experience?**Discuss a time you failed and describe the situation succinctly, not including too much detail. Take responsibility for your actions. Then discuss what you learned from the experience and how you can avoid it next time.

10. Tell me more about something not listed on your resume.

This is a time to share more information but don't get too personal. Highlight any outside activities or interesting facts about you or your family. Be personable, but don't overshare. A few examples may include running a marathon for cancer research, traveling a far distance for pleasure, volunteering or mentoring.

11. Where do you see yourself long term?

Many applicants think that the correct answer is to say that you see yourself with the company you are currently interviewing to work for. This is not necessarily true. While you may find a perfect match right away and grow in your career with one company, it is increasingly common for professionals to move from company to company, or even across industries as they develop special skills and interests. Rather than pledging loyalty to the company with your answer, focus on your career goals (as specific or general as they may be) and how this position is a steppingstone on the way to reaching those goals.

12. Why are you changing jobs or why are you interested in a career move?

Keep your answer short and to the point. One simple example is while I truly enjoyed my last position and team, I believe that I am ready for more challenging work in this field.

At the end of the interview, don't forget to ask the employer or hiring manager if they have any other questions for you or if they would like additional information. Sometimes getting a job is a matter of standing out and by providing samples of your work or references you will become memorable. If they do want to see references or a work sample, make sure to follow up and provide this detailed info ASAP. You should also give your references a heads up about the position and maybe send them the job description so that they know how to focus their recommendation.

Pro-Tip: Once the interviewer asks a question, repeat the question to ensure that you understand what the interviewer is asking.

Most Common Interviews Questions & Answers Continued

Additional Questions to Consider

Why are your grades not higher?

This is another question that can feel like a trick. Always accentuate the positive. Focus your answer on the areas in which you have succeeded, rather than making excuses for poor grades in courses. Highlight areas in which you have improved over time. You can also briefly mention any extenuating circumstances that have contributed to a period of lower grades, but don't dwell on it. This question is quite rare for most industry interviews but can show up in graduate and professional school interviews.

Tell me about a time you experienced conflict.

Like the previous question, this is much more about the strategies you experienced to address the conflict and less about the context of the conflict. Keep the details limited to the information that o demonstrated what you needed to resolve it. Focus on positive conflict resolution and productive strategies. Even if the story didn't turn out as well as you would've hoped, demonstrate the steps you took to positively enact change.

Leadership/Teamwork/Complicated Situation/ Initiative

Over the course of the interview, the employer may ask you behavioral interview questions that help to demonstrate the character and transferable skills necessary to succeed in the position. The key here is to be specific.

Have stories prepared in advance that address some of these major categories.



What salary are you looking for?

Try to avoid answering this question directly early in the interview process. Defer when possible by letting the employer know that this is negotiable and can be discussed further when a mutual interest is reached. If pressed further, give a salary range rather than a single number. And always do your research in advance to know what a typical range might be for this field/geographical location.

Pro-Tip: Be prepared to answer questions about diversity, such as "What is your experience working in a multicultural environment?"

Networking: Learn to Ask for Help

Whether you are just starting out as a first-year undergraduate student or you are an advanced graduate student or postdoc, you have experienced success by standing out. You've worked tirelessly in the classroom and lab. Now, we're going to ask you to do something else – learn how to ask for helpful career-related information from others who have done it before.

Anytime people talk about job searching, you will hear the term "networking." This job seeking technique continues to dominate the employment landscape, including how people land jobs, whether they have been out of the workforce for a while or not. Before we discuss the how-to of "networking," let's talk about networks in general. You probably encounter networks on a daily basis in your chosen field (e.g. think computer networks or the many networks in biology). Networks represent the connections among the different components of a large complex system. They also provide a mechanism for storage and communication of information through that complex system.

The job market operates very much as a complex system of networks. At a very elementary level, one or more persons in a company need resources and skills to accomplish goals. On the supply side, there are a set of people with various skills, backgrounds and education who need jobs. Job postings would seem to provide a direct mechanism for making this match between the demand for labor and the supply of qualified candidates. And occasionally job postings work for entry-level jobs. But there are a LOT of entry level jobs and a LOT of potential candidates. Those large numbers add a lot of complexity to the system, decreasing the likelihood that one candidate will stand out among the pool of applicants, regardless of education or background. For more advanced jobs, the numbers of jobs and potential candidates may not be as large, but the job requirements become significantly more complex. There are all sorts of mechanisms in place – HR systems within companies, job-listing web sites, recruiters, etc. – to cut through this complexity. However, communication through the informal and formal professional connections remains one of the most useful tools available to both job seekers and employers.

There are already vast professional networks in existence. LinkedIn is probably the best-known software embodiment of these networks. However, realize that it is the personal connections – some strong, some weak – underlying these links that are important. Do you have something in common that conveys some level of trust? You may be wondering how you can connect to this larger network. Fortunately, you are already a part of some smaller networks that are part of the larger system. Right now, you are a member of and work within small networks of fellow students. You rely upon them for a lot of information. But you are also a member of some networks that you may not even realize – and you almost certainly do not use. The main one that we will discuss is your alumni network. Alumni will generally assume that you have a lot of credibility, and many will be willing to offer help in some way.

What is "professional networking"?

It is simply starting a conversation and asking for advice. Sometimes, it starts off as a conversation between two people with different backgrounds exchanging information. It is usually a two-way exchange. You may be asking for information about a company, an industry, a job posting, etc., and in return, you may be able to offer information that is important to the other person. For example, alumni will usually be quite interested in what life is like at the school they attended years ago.

Pro-Tip: Check out the Top 50 Networking Hot Spots in Katharine Hansen's book <u>A Foot in the Door: Networking your Way to the Hidden Job Market</u>

Why is networking important and why should I start now?

When you are a student, you can respond to job postings and go to career fairs. Then your resume makes its way through a largely opaque process – a "black box" – and you may be contacted by the company if you are chosen.

Networking Continued

This is a bit of simplification -- there may one or more interviews and maybe even a quiz if you are in CS – but the process is usually opaque to people outside the company. Wouldn't it help if you knew a little about that process? The people inside the company may not know the entire process, but they have a better idea that you will outside. So, if you could talk to someone inside the company, you might glean a bit more information about that process.

Even if this particular effort doesn't result in an internship or job, you might gain some very useful information for future searches in this company or searches in the same industry. Learn something about what an alum does in their job. You also might learn something about the culture of the company.

What Does the Potential Employer Gain?

Put yourself in the position of the person in a company wanting to hire – the manager, scientist, or engineer who will decide which candidate to hire. That person probably has a stack of 100 resumes, and they will need to distill the resumes to a number that can be interviewed. We try to make resumes as complete and accurate as possible, but ultimately what is on that piece of paper is only a limited picture of a candidate's experience or potential. As a simple example, how do you compare courses with similar names from different universities? In addition to the resume being subjective, hiring managers cannot tell who is interested in a specific position just because that person submitted a resume. Any additional information, such as an inquiry through an alumnus is highly desirable and can help your resume stand out and increase the chance that you will be selected for an interview.

We Can Help!!

Caltech Alumni Advisors Network (CAAN)

The CAAN program allows students to choose advisors or mentors from a volunteer pool of alumni who may have experience in your major field of study or career interest. Although it is still early stage, there are already a significant number of alumni who have volunteered to mentor students. You can take advantage of this resource when you first begin your job search or throughout the process. Some students leverage this resource by asking for informational interviews with alumni who work in a similar industry or company of interest.

LinkedIn Alumni Directory

You may also decide to use the LinkedIn network to learn more about the employment landscape in your industry. Using LinkedIn is a strategy that will be around long after you have transitioned to work or even completed graduate work. Say that you are interested in exploring internship opportunities in your home city. Let's identify alumni in that home city. First, make sure that you have a LinkedIn profile. It doesn't have to be perfect, but make sure that you list Caltech as your school. Then, go to LinkedIn and search for Caltech. You should easily find the Caltech LinkedIn page. On the left-hand side, there will be several tabs. Click on the Alumni tab. You will then be able to search within this set of alumni for your geographical area. Look through these alumni and pick out one or two that you can reach out to for more information.

Pro-Tip: Use the Career Development Center's library for resources on how to write a LinkedIn profile that will get you noticed and put you at the top of recruiters' searches.

LinkedIn has a messaging feature, but, unfortunately, you can't generally send those messages with a free account. (You may be able to do so if you belong to one of the same LinkedIn groups that the alum does.) A great alternative is to send the alum a message via the Caltech alumni directory. The alumni directory acts as a conduit for delivering messages to alums from students; so if you type a message the alumni association will send it for you.

Networking Continued

Elevator Pitch

You meet an alum or someone at a company that might interest you. What do you say? Develop a 30 second personal statement or "elevator speech." As you do this more, you'll be able to modify it. But initially, make sure that you state your name, your major field, some background (e.g., related activities in a club), and something that you'd like to learn from them. Practice the speech, as that will help you become more polished. This can be very useful at meetings, receptions, networking events where you meet many people.

Context is important in these conversations. If this is a recruiting event for a company or a panel discussion at the career office, you can assume that the topic of internships or jobs will be the likely subject of most conversations. However, if you happen to meet someone at an event unrelated to job searches, you might want to focus on more open-ended topics - asking them about their career, company, etc. If you simply ask if they have a job, the answer can be short.

Informational Interviews

Say that you've identified an alum at a company that you are targeting for a possible internship or job. (We'll talk later about how to identify the alum and contact them.) Send them a message and ask to talk to for a few minutes to get some information about working at the company.

Email Request Example

Dear Dr. Smith

My name is Callie Tech. I found your name through LinkedIn and the Caltech Alumni Association Directory. I'm a sophomore mechanical engineering major, and I'm contacting you because you work in an aerospace company. I've had some exposure to research in mechanical engineering, having worked through SURF in the lab of Professor Young. My research topic was aerodynamics. I'm trying to gain a better understanding of my career options. Aerospace is one of the fields that sounds appealing, and I'd like to learn about your experiences.

Would you have a few minutes that we could talk on the phone, via Skype, or in-person (if close)? Thank you.

Best regards, Callie Tech

Preparing for the Conversation

Look through the alum's LinkedIn profile, so that you know something about how they got to this point in their career. Also, you don't need to spend a lot of time researching the company for which the alum works, but take a quick look on the company website.

Then have a few questions in mind. This is a conversation, and it may go in different directions. But you are trying to gather information about the company and field. Ask about the projects that the alum or entry level people work on. If it sounds interesting, ask what background you would need to be a good candidate for them. There are a lot of other questions that could occur to you.

Remember, this is simply a conversation. Think of the situation that you are on the street, are a bit lost, and you don't have your phone to guide you. The easiest solution for you to find where you should go would be to ask for directions. You are doing the same thing here.

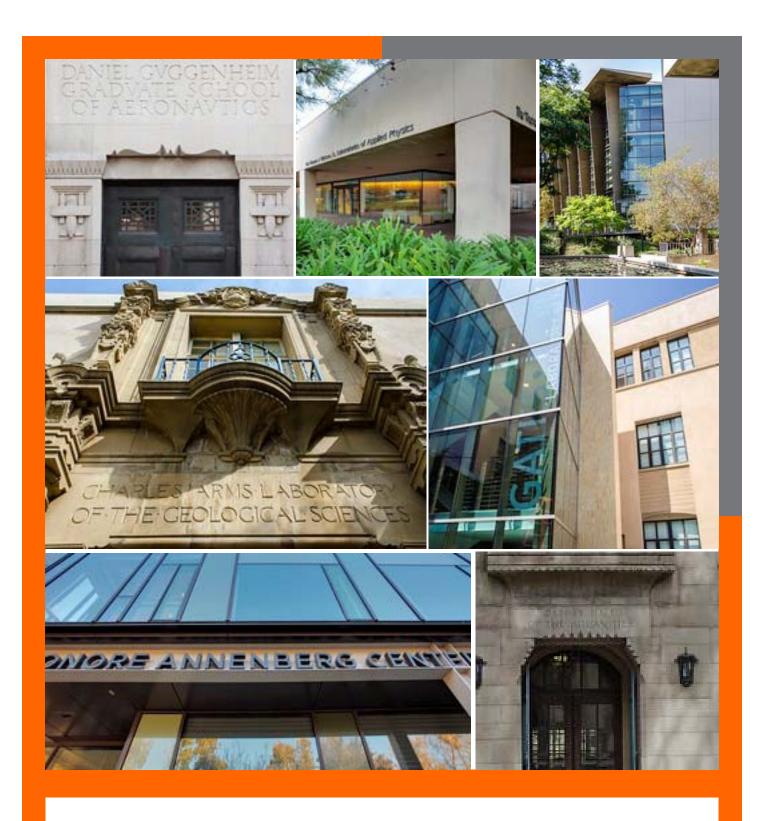
Winter 2020 Workshop Calendar

All workshops are held in the Career Development Center Workshop Room #310 located on the third floor of the Center for Student Services.

Lunch is provided for all noon events.

Pre-register: https://app.joinhandshake.com/events.

Workshop	Date	Time
Career Fair Preparation	Tuesday January 7, 2020	12:00 PM
Resume Rescue	Thursday January 9, 2020	12:00 PM
Optimizing your LinkedIn Profile	Tuesday January 14, 2020	12:00 PM
Projecting Confidence in Interviews	Thursday January 16, 2020	12:00 PM
Networking for Introverts	Tuesday January 21, 2020	12:00 PM
Career Fair Preparation	Friday January 24, 2020	12:00 PM
Summer Options for Pre-Meds	Monday February 3, 2020	12:00 PM
Post-Career Fair Job/Internship Search Strategies	Tuesday February 4, 2020	12:00 PM
Ace the Interview	Tuesday February 11, 2020	12:00 PM
Academic Job Search	Thursday February 20, 2020	12:00 PM



Caltech

2019-2020 Career Guide Career Development Center