



Technology  
Career Community

# CAMPUS TO CAREER PRIMER



Center for Careers  
and Internships  
*at Middlebury*

## Campus to Career Primer

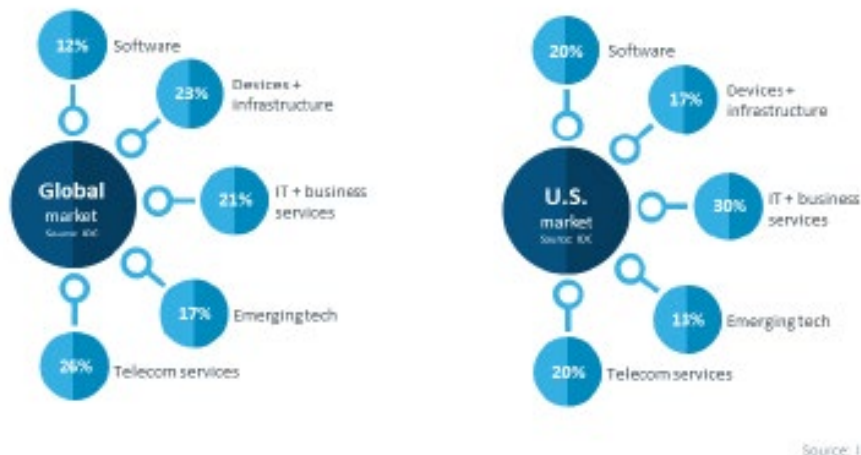
### The Global Information Technology Industry: \$5.2 Trillion

Estimated 2010 spending at constant currency | Encompasses hardware, software, services and telecommunications



## A Primer for Students Interested in Pursuing First Destination Roles in Technology

### Key Categories of the Information Technology Industry



Career pathways are an individually determined journey. This document is intended to delineate several of the traditional career pathways for students within a liberal arts academic environment as a helpful tool for students to determine and design their first destination strategies and tactics. Contained in this document are:

- Career Roles and Pathways that may be relevant to CSCI majors/disciplines;
- Three Stages in the Campus to Career Pathway:
  1. Researching and Preparing;
  2. Applying for Career Opportunities; and
  3. The Selection Process (interviewing)
- Resources for Students during their career exploration process.

The following content has been developed from many sources including: alumni and parent members of the Technology Career Community (TCC), many technology industry employers, as well as, other industry-related sources.

## The Big Picture

The United States is the largest tech market in the world, representing one-third of the total global market. It represents an industry which accounts for the highest number of fastest growing companies. The Internet of Things (IoT) now links millions of devices that were previously unconnected to the web. Technology sector reports indicate that the number of internet-connected devices will hit 50 billion by 2030. Organizations of all types (for profit, non-profit, public sector) will need to deploy AI within their work activities within the next five years to continue to succeed in their respective areas of expertise.

Notwithstanding a robust job market for careers in the technology field, securing an internship or full-time position is a very competitive undertaking which will require commitment on your

part: commitment of time in your busy schedule, as well as, quality of effort.

There are many paths to a rewarding career in technology. Some graduates will pursue a career with a large enterprise or a start-up, while others may prefer small community-based employment. Still others will elect to become educators.

A few careers in technology require post-graduate schooling, e.g., a PhD to become a Data Scientist. It's not uncommon for students to work in their prospective field for a couple of years before entering graduate school, testing their interests and learning valuable skills. Language skills can be immensely useful and represent a distinguishing characteristic in your candidacy for internship and first destination career roles.

The best ways to affirm your career interests are to speak with others who have experience with the career roles you are exploring (family members, friends, alumni) and by doing internships involving the knowledge and skill sets generally required in those career roles. Generally, internship and job seekers prove most successful when they are able to relate their academic achievements, extracurricular accomplishments, work experiences, personal motivations, and relevant technical and soft skills to the career roles sought. Use the TCC group members and resources to help prepare for your preferred future.

# Career Roles and Pathways

There are several career pathways in the tech industry for students majoring in computer science, as well as other disciplines, i.e., you do not have to be a CS major to work in the tech industry. Broadly speaking, one can divide the career role universe into three pathways, one which is technically focused (e.g., software engineers, data scientists), a second which is more focused on customers/users of products and services (e.g., product managers, UX designers, project managers, customer success), and the third which includes other business functions (e.g., finance, marketing/advertising, human resources). In the technical cases, a strong foundational preparation in data structures, algorithms, programming languages, and math coursework will prove most beneficial. A few of the classic entry level roles in the broad-based tech industry are described below (note: specific role titles may vary and over time new entry-level roles will undoubtedly emerge as technology continues to evolve):

## Technically Focused Roles:

**Front-end Developer:** A software engineer who specializes in the development of the user interface (UI) is called a front-end engineer. The user interfaces include visual elements like layouts and aesthetics. Front-end engineers deal with cross browser compatibility and fixing bugs to ensure an excellent visual presentation of the UI. Thus, they work with the code that runs on different user devices, browsers, and operating systems. Developing a responsive application also comes under this. A few of the common qualifications include:

- Experience with data structures or algorithms gathered from inside or outside of school or work.
- Experience programming in three or more of C, C++, C#, Java, JavaScript, Go, Python or similar.
- Experience with web application development, UX, Unix/Linux environments, mobile application development, distributed and parallel systems, machine learning, information retrieval, natural language processing, networking, developing large software systems, or security software development.

**Back-end Developer:** A software engineer who specializes in the underlying logic and performance of the application is called a back-end engineer. They often design and implement the core logic, keeping in mind scalability for server-side development. They do this by integrating with data systems, caches, email systems using Application Programming Interfaces (APIs). Typically backend engineers also have expertise in building aps, distributed systems, queues, parallel processing algorithms, etc. A few common qualifications include:

- Experience programming with one or more: Java, C, C++, Ruby, Perl, Python, Scala, Go
- Familiarity with frameworks: Spring, Micronaut, Django, Flask
- Basic understanding of data structures and algorithms, e.g., linear and binary search, hashcode, data sorting, stacks, queue, and lists.
- Familiarity with database management systems, e.g., PostgreSQL, Oracle, SQLServer, AWS
- Understanding the basics of the Linux operating system

**Full-stack Engineer:** A software engineer who is fluent in front-end and back-end skills and responsibilities is referred to as a full-stack engineer. These individuals possess all the skills necessary to create a fully functional web app, from the front-facing user experience to the complex systems behind it. A few common qualifications include:

- Familiarity with UX and UI frameworks
- Experience programming with CSS, JavaScript, HTML, Java, C, C++, Ruby, Perl, Python, Scala, Go
- Knowledge of HTTP and REST protocols
- Experience with one or more: Kubernetes, Docker, Apache Mesos, Jenkins, HashiCorp stack (Terraform, Vault, Consul, Nomad)

**DevOps Engineer:** Software engineers who are familiar with the technologies required for the development of systems to build, deploy, integrate and administer back-end software and distributed systems are called DevOps engineers. DevOps (development and operations) engineers apply processes and methodologies to streamline product development, improvement and maintenance as well as facilitate communication between development and operations teams. Their work requires familiarity with the processes used by back-end developers to build, deploy and integrate across technologies, like cloud computing services. They mostly manage the application infrastructure, i.e., the database systems, servers, etc. A few common qualifications include:

- Experience programming with JavaScript, Java, C, C++, Ruby, Python
- Experience with one or more: Kubernetes, Docker, Apache Mesos, Jenkins, HashiCorp stack (Terraform, Vault, Consul, Nomad)
- Familiarity with cloud storage applications such as OneDrive, GitHub and Amazon Web Services (AWS)

**Security Engineer:** A software engineer who specializes in creating systems, methods, and procedures to test the security of a software system and exploit and fix security flaws is called a security engineer. This type of developer often works as a “white-hat” ethical hacker and attempts to penetrate systems to discover vulnerabilities. A few common qualifications include:

- Knowledge of IT Security concepts and fundamentals
- Excellent written and oral communication skills
- Knowledge and/or experience with IT system administration or network administration and troubleshooting
- Experience with Operating Systems – Linux/ macOS/ Unix / Windows
- Knowledge and understanding of TCP/IP Network Fundamentals
- Knowledge and understanding of basic routing protocol fundamentals
- Knowledge of Firewall Fundamentals and/or experience with Firewall administration and management
- Experience programming with Python, Ruby, C, C++, Java

**Hardware Engineer:** Computer hardware engineers research, design, develop, and test computer systems and components such as processors, circuit boards, memory devices, networks, and routers. They ensure that computer hardware components work together with the latest software.

- Bachelor's degree in Electrical Engineering, Computer Engineering, Computer Science, or a related technical field.
- Experience in one or more of the following areas: Hardware System Integration, Signal and Power Integrity, RF System Validation, Bluetooth, Wireless Communications, Product Design, Test, Computer Architecture, Microarchitecture, Digital Design Verification, Digital Circuits, ASIC Physical Design, Electronic Design Automation, FPGAs, Embedded Systems, Compilers, Hardware/Software Co-design, Emulation, Memory Systems, Design methodology.
- Experience working on consumer hardware projects.
- Experience with wireless communication interfaces and sensors
- Experience with board layout (e.g. working with CAD/PCB design), Systems Integration, RF, Hardware Test, or Antenna

**Quality Assurance Engineer:** A QA engineer, also referred to as a "software engineer," tests, reviews, assesses and writes software to validate the quality of an application. These individuals create automated tests, tools and methods to make sure systems are running as expected, catching errors and working to account for their solutions. A few common qualifications include:

- Understanding of QA methodologies
- Experience writing automated tests (Cypress, Selenium, Ruby, Javascript)
- Analytical, organizational, and time-management skills with high attention to detail
- Strong interpersonal and communication skills to collaborate with development teams and product managers

**Embedded Systems Developer:** software integration engineers use coding languages to program hardware like consumer devices, home security alert systems, electronics, interfaces, real-time systems and serial data transmissions. A few common qualifications include:

- Coursework in software development, embedded systems, product development, system software, engineering services, and programming.
- C, C++, Assembly, Java, proprietary technologies/frameworks/toolkits

**UX/UI Engineer:** A user experience (UX) engineer builds and designs digital products like websites and apps while using UX principles. UX engineers generally deal with the front end of these products—the user-facing parts that people interact with, like the buttons, layouts, and flow of the interfaces. A few common qualifications include:

- Experience in JavaScript and frontend frameworks (Angular2+, Vue, React)
- Experience in development or prototyping.
- Experience coding in Go, Python, C++, Java, Kotlin, Objective C, Swift or similar
- Familiarity with design tools and with all the things in frontend engineering - with some aspects of Product Development like defining requirements

**Game Developer:** a game developer, has specialized knowledge in designing and implementing gaming systems that are both engaging and interactive. They use creative skills like storytelling and world-building to program complete environments in which a game can take place. From setting to props to characters, game developers code all the factors that create the gameplay experience for a user. A few of the common qualifications include:

- Familiarity with DirectX, OpenGL, Unity 3D, WebGL, C, C++, Java, Swift, JavaScript, HTML5 multimedia frameworks, 3d model frameworks
- Proficient with programming languages, including C++, Java, and C
- Experience building libraries and APIs
- Knowledge of the latest gaming trends
- Strong artistic and technical skills
- Design and creativity

**Data Engineer/Data Analyst:** a data engineer develops software programs that analyze information. This often puts them in charge of statistical analysis, machine learning, data visualization and predictive modeling, providing an organization with metrics that can help determine how a product will grow to fit the needs of the business. A few common qualifications include:

- Some Engineering experience and or project course work using large data systems on SQL, Hadoop, etc.
- Proficiency using one or more programming or scripting language to work with data such as: Python, Perl, or C#.
- Some experience and or project course work performing data analysis and applying statistics working with tools such as: Excel, R, MATLAB, AMPL, or SAS.
- Proficiency with data visualization/reporting.
- Coursework in machine learning encouraged
- Strong interpersonal and communications skills.

## Customer/User Focused Roles:

**Product Manager:** The Product Manager is responsible for the product planning and execution throughout the Product Lifecycle, ensuring that the product supports the company's overall strategy and goals. Key work activities include:

- Gathering and prioritizing product and customer requirements
- Defining the product vision
- Working closely with engineering, sales, marketing and support to ensure revenue and customer satisfaction goals are met.

A few common qualifications include:

- Customer centric
- Strong communication skills, persuasive
- Strategic thinker and analytic
- Team orientation, empathetic

- Problem solving
- Familiarity with SWE, data analytic, UX/UI design roles and requirements

**UX Designer:** A UX designer makes products and technology usable, enjoyable, and accessible for humans. UX designers tend to work as part of a wider product team, and will often find themselves bridging the gap between the user, the development team, and key business stakeholders. As a UX designer, it's your job first and foremost to advocate for the end user or customer. Whether you're designing a brand new product, coming up with a new feature, or making changes to an existing product or service—the UX designer must consider what's best for the user and the overall user experience. A few common qualifications include:

- Currently pursuing a degree in Design (e.g., Interaction, Graphic, Visual Communications, Product, Industrial, etc.), Human-Computer Interaction (HCI), Computer Science (CS) or a related field.
- Experience with industry standard design tools (e.g., Photoshop, Illustrator, Sketch, InVisio, Principle, etc.).
- Experience in designing usable interfaces.
- Experience working with web or mobile based technologies such as HTML, CSS, JavaScript, Android Studio, XCode, etc.
- A design portfolio demonstrating design principles for web and/or mobile platforms.

**Project Manager:** Project managers are responsible for planning, organizing, allocating resources for, budgeting, and successfully executing organizations' specific IT goals. Such projects might include: Software and app development; projects around business analytics and data management. A few common qualifications include:

- Software development lifecycle, scheduling, forecasting, communicating
- Organization skills, time management skills
- Some experience with project management concepts and tools
- Excellent written and oral communication skills
- Excellent interpersonal skills

**Technical Writer:** Technical writers often create diagrams to show users how a product works. Technical writers, also called technical communicators, prepare instruction manuals, how-to guides, journal articles, and other supporting documents to communicate complex and technical information more easily. A few common qualifications include:

- Facility with technology
- Ability to write clearly
- Talent in showing ideas graphically
- Patience in problem-solving/troubleshooting
- Ability to interact with SMEs (Subject Matter Experts)

If you wish to explore roles more, you may want to visit [TechGuide](#) which provides a glimpse at career options and what sorts of degrees, training, and certifications are required.

# Three Stages in the Campus to Career Process

With appropriate academic exposure and an understanding of the various types of roles and associated qualifications, candidates are in a position to best position themselves to secure their desired internship and first destination roles.

The hiring process for most employers is about selecting the “right person” for the position to be filled. As you undertake the phases in this stage, keep in mind that recruiters and hiring managers are evaluating candidates on three elements: competencies (can you do the job?), motivation (why do you want to do this job and with our firm?), and fit (do you have the personal qualities and a mental mindset that are consistent with the mission, values, culture of the employer – can you be successful there). So knowing that these are the elements on which you will be evaluated, make sure that your application materials and your interview responses address these elements. The more you can answer the questions above for each element, the lower the hiring risk for the employer, and the higher the probability of success for you in being hired.

There are three stages in the campus to career process: Researching and Preparing; Applying for Career Opportunities; and the Selection Process. If you do the things suggested below, the probability of you getting what you want will go up!

## Researching and Preparing

Before students start applying to the vast amount of opportunities in the technology field, they should first “do their homework”. This means understanding what the various types of entry-level roles there are (the previous section can be a starting point for this research). The basic idea is to understand what the role does, the qualifications for the role, and destinations that this first entry role can lead to from a medium and longer term perspective.

In addition to looking for this information in various job descriptions available in many job boards, students should also talk with other individuals who are familiar with these roles. Great places to find these individuals are within your own personal networks (family and friends), as well as, the Middlebury Professional Network – many sources of career intel and advice can be found on Midd2Midd within the Technology Career Community (TCC) group. More information on the whys and wherefores for talking with individuals within your available networks is discussed below.

Next, with this research information, students should then map their own experiences (academic, extracurricular, work, and life) to the requirements of various roles; this mapping can help in two ways: 1) help you prioritize roles that may be a good fit for you and 2) help you to tune up your resume and cover letter content to more accurately reflect your qualifications for a given role to which you may be applying. Students should meet with one of CCI’s PCAs (Peer Career Advisor) to “tune up” their resumes for the next stage in the process.

## Applying for Career Opportunities:

A few thoughts on the application process. First, your mentality should be quality over quantity. It’s not about the volume of applications you have submitted but rather choosing your targets (job role and organization) wisely and connecting the dots (your fit with the role and organization being

sought) for anyone reviewing your application materials. The work that you did in researching and preparing your resume and cover letter (and any other application materials) so that they align clearly with the qualification sought by the employer/role to which you are applying will raise your profile with the recruiter/hiring manager; the easier it is for them to see that you are perfect for the role, the better.

Secondly, generally, you should only apply to those opportunities for which you have had some communication (in person, virtually, or email) with someone within that target organization. There are three main strategic reasons for making the effort to communicate with someone within the target organization:

1. You will be able to gain important intel about the role and the organization that can help you determine if it is a good fit for you, and that intel can help you better tailor your application material with insightful content;
2. The individual with whom you communicate may be able to have an influence on whether your application is seen by the recruiting and/or hiring managers and advocate for you; and
3. Your profile within the recruiting and/or hiring manager's mind will be raised relative to the other many candidates who have not demonstrated this initiative and motivation to speak with people employed in the organization.

This is where your efforts in the Research and Preparation stage to speak with people in your networks pays off.

Everything up to this point has been about getting an interview; next comes getting to an offer! The really good news is that much of the work you did to this point will be valuable to you in the selection process as well.

## The Selection Process:

Typically there is a multi-phase interview process for most roles in the industry. The specific types and focus for the interview phases is described below; the actual number of each type of interview may vary from role to role and organization to organization. One other “habit” of the industry to take note of is that unlike other industries, e.g., finance and management consulting, many tech industry employers take their time getting from the initial screening of applications to an offer, in some cases many weeks. The fundamental mindset is that they would rather take their time making a good hire decision rather than make quick bad hire decisions.

## Preparing for Your Interview:

- **Do Your Research** - Don't stop at understanding the position you're interviewing for. Learn about the employer and how the position contributes to helping the employer to achieve its mission. You should understand what's happening in the tech industry and what the employer is doing well, and how they may differentiate themselves from their competition. Learn about the team with whom you will be interviewing: understand what they do, and reflect on how and why you want to be a part of it. This is also a chance for you to make sure that the opportunity is what you are looking for. Make sure to prepare questions to ask during your interview.

- **Know Your Core Competencies** - The interviews will include competency-based questions, as well as questions about your resume. Keep the core competencies in mind. Think of examples you can share or incorporate into your conversation. For example:
  - Collaboration. Communicating effectively within the team and across teams.
  - Drive for results. Working tenaciously to deliver on commitments, constantly seeking bigger challenges, holding yourself and others accountable.
  - Customer focus. Our mission at Microsoft is to empower every person and every organization to achieve more.
  - Influencing for impact. Successfully persuading and influencing others with effective communication.
  - Judgment. Effectively scoping complex problems and making knowledge-based decisions.
  - Adaptability. Ability to deal with ambiguous and uncertain situations or problems with agility.
- **Understand your Fit** – Your online research about the organizations beliefs and programs to support employees is helpful but the real gold nuggets come from speaking with people who work there (or have worked there). Every organization is different with its own culture, set of values, and work environment. You need to know what these elements are so that you can determine if you can see yourself being successful at the target organization so that you can best articulate to the interviewers how you can be successful with them and contribute to their success.
- **Articulate your Motivations** – Why do you want this job vs anything else you could do? What have you done (studies, experiences, interests) that would be strong evidence that you want to pursue this career path? Why do you want to work with this organization vs others that do what they do or in which your target role exists? Does your story make sense that causes smiles and head nods from the recruiter/interviewer or not make sense, causing furrowed brows and confused looks?

The interview phases generally consist of some form of Screening Interview to kick off the selection process, one or more Technical Interviews to assess your job role competencies, and several Behavioral Interviews to assess your motivations and fit with the role and organization.

Screening Interview. The screen can consist of two types. One type focuses on validating your application content, e.g., “walk me through your resume” and is typically conducted by a recruiter or is an online set of prompts. The second type is a more technical screen which is increasingly being conducted as an online problem set. Some employers may ask the candidate to complete a “take-home” assessment to understand a candidate’s decisions and self-direction while programming against a problem given a specific set of constraints. The problem sets here are generally closely related to the role for which the candidate is applying.

A candidate must pass an interview screen to get a chance to speak with the hiring manager and others involved in the selection process. The screen exists merely to ensure that the company and the candidate are working within the same ballpark compensation, role expectations, and general technical skillsets.

**Technical interviews** are problem-solving focused and cover technical excellence and core competencies. You'll be assessed on your knowledge of technical principles and methods, as well as on how you approach problem-solving, your technical agility, and your ability to think strategically to solve complex problems. Generally, the technical interview process will evaluate you on all the following:

- **Problem Solving** - Interviewers want to see how you break down information and navigate through problems. They also want to learn more about how you think, how you put yourself in the customer's shoes, and how you make choices. Ask clarifying questions for any ambiguities and come up with a plan before you implement a solution. Managing your time is important, given the short 45-minute interview round.
- **Design** – This assessment is also looking for engineers who can work not only with an existing platform, but who also understand what it takes to build or design a new system or platform from scratch.
- **Coding** - Demonstrate best practices and ensure your code is clean, concise, and bug free. You'll be asked to code only in the language you're strong in. You'll be using a third-party coding tool where you can run and compile your code. **Practice, practice, practice.** This can't be overstated. **This is a critical part of the interview.**
- **Algorithms** - Interviewers want to see what types of algorithms you use to implement your solutions. Recursion can be a common pattern for some types of questions. You should know the details of at least one  $n \cdot \log(n)$  sorting algorithm, preferably two (for example, quicksort and merge sort). You'll need to explain the complexity of your algorithm.
- **Data Structures** - These are some common data structures that tend to come up often in questions: arrays and strings, queues and lists, linked lists, trees/tries, hash maps/hash sets, graphs. You should be familiar with when to use each one and describe their pros and cons.
- **Testing** – It is possible that your interviewers will expect you to do some testing or show you understand how to test your solutions. When you finish your solution, don't forget to test it before you say "done!" Remember, your basic responsibility is to make sure the feature you've coded works. Then, consider all the factors that could cause problems. What are the security implications of the feature? How can you stress this code? What are the boundaries and error conditions?

Depending upon the role you are seeking, interviews may touch upon the content below:

- **System Design** - Knowledge of distributed systems, SOA, and n-tiered software architecture is very important in answering system design questions. Resiliency, high availability, auto-scaling, replication, CAP theory, partitioning, all may be included. If you don't work with these concepts regularly, make sure to review them before your interview.
- **AI/Machine Learning** - Experience with machine learning models and training pipelines to perform model evaluation, profiling, and optimization; AND Ability to apply, implement, and/or develop AI/ML algorithms and principles to solve complex problems.
- **Data Science** matters, including:

- Data Manipulation/Fluency/Data Insights and Exploration. Can you deal with data at various dataset levels, and how do you reason with the data as scale of data increases, run time, and so on.
- Probabilistic Thinking/Mathematics. There may be specific math or statistics questions and open-ended questions. We're looking for how you process problems; how you analyze, clarify things, and draw solutions; and also how investigative you are about the data or results you have.
- Statistics. Linear regression, time-series complexity, hypothesis testing/probability (t tests/p-values, and so on).
- **Computer Networking** - Show your understanding of the layered model, application-specific protocols like HTTP, security-related protocols like TLS, network-level protocols like TCP and IP, and routing protocols like BGP and ISIS.

## Behavioral Interviews

“Tell me about a time when . . . ” or “Describe how you . . . ” are how most behavioral interview questions begin. This provides you with an opportunity to tell a relevant “story” that highlights your skills or how you have demonstrated competency in an area of importance to the position you want. We strongly recommend you use the STAR framework (page 9) to clearly and concisely communicate concrete examples from your past experiences. Think through examples of situations where you have demonstrated certain behaviors or qualities for which the organization is searching (e.g., teamwork, analysis, creativity, etc.) and practice telling your story. For more general interview prep guidance, check out the Interview Preparation Guide among the many resources available on the CCI website.

In a software engineering context, this set of interviews is typically to assess the candidate's motivations and to assess the candidate's future potential with the employer. This interview is where the candidate will be asked questions related to the core values of the organization. Many engineers make it through the technical assessments, but cannot speak to what it means to be a collaborative and supportive teammate on an engineering team. This element is where Middlebury students may have an advantage with more of a liberal arts background. Good energy, the ability to tie your personal motivations to the employer's mission and values and being prepared with really thoughtful questions about the engineering experience will go a long way here in standing out compared to other candidates.

This set of interview is usually conducted by a Product Manager or some sort of UX / UI Designer. This interview assesses the candidate's ability to work effectively with non-technical stakeholders. Specifically they need to demonstrate efficacy in communicating complex technical tradeoffs to the non-technical people that need to make decisions around those tradeoffs (sequencing, roadmaps, etc.). Generally the interviewer is looking for ways that the engineer ties their work back to the business and the business' overall goals. Engineers who incorporate this thought into their work over time are more likely to be promoted into managerial roles.

And that's the interview process! Make sure that you send follow-up thank you messages to each and every person with whom you interviewed throughout the selection process. Also, be sure to

keep the network individuals who have helped you to this point informed as to the status of your search.

It is reasonable to follow-up with the recruiting manager/coordinator (likely the first person who contacted you to begin the interview process) regarding the status of your candidacy one to two weeks following your final interview; hopefully, they will have already informed you as to what to expect regarding their selection decision at the conclusion of your last contact in the process.

## Resources for Students

The Technology Career Community (TCC) offers various resources and assistance to help students pursue career roles of their choice in the technology field whether in a tech company or any other industry, e.g., data analytics, software engineering, and non-technical roles. Several resources to help you navigate to your career role of interest and to pursue internship and first destination opportunities are provided on the Resources tab of the TCC group – check them out in the group’s M2M page. Explore your interests through your own research, meeting with a career advisor, and speaking with alumni who have experience in the industry and the roles of interest to you. Below are a few of these resources.

### TCC Resources

1. 1:1 Networking/Career Conversations with Alumni members of the TCC
2. Practice Technical Interviews with alumni members of the TCC
3. Career Advising Appointment with CCI advisor
4. Discussion Board to engage members in a topic of discussion and to post project, internship, job opportunities
5. In the News PDF
6. Industry outlook studies/reports
7. Event Schedule
8. Opportunities
9. Job board links
10. MiddVantage PDF of recorded content with alums in various roles in tech
11. FutureForward PDF of recorded content with leaders in tech
12. Live From DC Webinar series PDF of recorded content discussing issues in tech
13. Campus to Career Primer PDF
14. Resume, Cover Letter, Interview Guides
15. Preparing for Your Interview PDF

CCI has many programming formats which can support the creation of Career Development Modules within the Campus to Career Pathway, including:

#### [Field Guides](#)

Co-sponsored by departments, these Field Guides bring alumni back to campus virtually to share knowledge and experience related to their post-Middlebury careers and professional lives. (20 Field Guides to date)

#### [UpNext](#)

Each UpNext event brings alumni in a specific industry to campus to give students an insider’s understanding of that industry, available career paths, and info about roles and skills necessary to enter future jobs and internships. Last program on March 6, 2020, UpNext: Careers in Data Analytics. (over 200 students in attendance for day-long program)

#### [MIDDVantage](#)

The program is designed as a series of “episodes” both recorded and live that delivers a robust set

of content, providing knowledge about a specific career field as well as skill development relevant to that career path. The series targets all class years. (7 series to date, over 3000 student views)

#### [Future Forward](#)

Futureforward features several alumni and parents who are leaders in a variety of career fields, discussing their industry's current environment, their perspective on the future outlook for that career field, and action steps students can take now to position themselves for entry into those career fields. (over 1988 views and nearly 70,000 LinkedIn, Twitter, and Facebook Impressions)

#### [Student Treks](#)

Hosted over breaks, these CCI-led trips are cohort experiences that provide students with an opportunity to explore a particular field of interest. CCI works with members of the Middlebury Professional Networks (MPNs) to plan meaningful experiences. Activities include but are not limited to the following:

- Job Shadowing opportunities with industry-specific alumni in various job functions and roles
- Reflection dinners
- Opportunities to engage with alumni and Middlebury parents
- Career Networking Reception for alumni and students

**Career Conversations** are in person or virtual sessions conducted with professionals within the career field and students. Typically, these programs are structured involving one professional who focuses on a specific topic of interest (employer, career role, industry trends, or relevant technical skills) in a presentation format, allowing Q&A from a student audience.