

Exploring Computing Careers: Navigating Your Educational Journey

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Finding a Job You Will Love: Matching Your Interests to Your Superpowers



What are your superpowers?

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Finding a Job You Will Love



What are your superpowers?

- Knowing yourself, trusting yourself
- Stepping out of your comfort zone
- Learning from experiences, both positive and negative

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Using StrengthFinders to Find My Superpowers

- Maximizer
- Individualization
- Ideation
- Relator
- Learner

My Superpowers

Maximizer – You focus on strengths that stimulate personal and group excellence. You seek to transform something strong into something superb.

Individualization – You are intrigued with the unique qualities of each person. You have a gift for figuring out how different people can work together productively.

Ideation – You are fascinated by ideas. You can make connections between seemingly different concepts and strategies to help people think in new ways, and to find fresh ways to do things.

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My Superpowers

Relator – You enjoy close relationships with others. You find deep satisfaction in working hard with friends and colleagues to achieve a goal. You ask insightful questions to share wisdom tailored to each individual.

Learner – You have a great desire to learn and continuously improve. People notice that you are genuinely interested in what they have to say. You will dive into a topic to figure out how it can benefit others, and you enjoy sharing what you have learned.

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Exploring CS Careers: Software Developer

- Turn ideas into applications, from conception to product release
- Design apps on mobile devices, PCs, servers, or embedded devices like wearables, drones, remote sensors, and appliances like Smart TVs & assistants
- Work with marketing, dev, and test teams on design & usability
- Hard skills: ASP.NET, JavaScript, Java, C#, Python, Rust
- Essential skills: Teamwork, collaboration, communication
- Career paths: Web Dev, Programmer, Database Admin
- **Degree: BS in Computer Science or Information Technology**
- **Salary: \$65-80k (Entry), \$80-100k (Mid), \$100k+ (Experienced)**
- **Role: Industry, Government, Academia, Entrepreneur**



Information and materials courtesy of <https://www.computerscience.org/careers>

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Exploring CS Careers: Web Developer

- Freelance or work with company teams to design and create websites
- Front-end design/content management or on back-end web features including functionality, payment & databases
- As webmaster, test deployment, maintenance, troubleshooting, and updates
- Hard skills: PHP, CSS, JavaScript, ASP.NET, Angular.js, Python, Java
- Essential skills: Dev tools and frameworks, multitasking, self-motivation, organizational skills, and attention to detail
- **Degree: AS in Web/Mobile Programming, BA or BS in CS**
- **Salary: \$50-56k (Entry), \$56-66k (Mid), \$70k+ (Experienced)**
- **Roles: Any (Industry, Government, Academia, Freelance)**



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Exploring CS Careers: Database Administrator

- Maintain and protect sensitive information, and provide access to important datasets for companies, institutions, and government bodies
- Backup, restore, and troubleshoot database sets and system access
- Skills needed include knowledge of structured query languages (SQL), experience across multiple operating systems, cybersecurity, analytics, business, communication, problem-solving, organization, report generation
- **Degree: BS in Computer Science or Information Technology**
- **Salary: \$50-60k (Entry), \$60-80k (Mid), \$90k+ (Experienced)**
- **Roles: Industry, Government, Academia**



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Exploring CS Careers: Information Researcher

- Study and solve problems in computing, and may include a specialization in robotics, data science, programming, or working closely with other engineering and programming professionals
- Hard skills: Programming, Discrete Math, Data Science, Machine Learning, Data collection & analysis
Essential skills: Organization, analysis, communication, collaboration
- **Degree: BA/BS in CS, though most roles require an MS in CS or a related field, depending on undergraduate degree**
- **Salary: \$90-100k (Entry), \$100-130k (Mid), \$170k+ (Experienced)**
- **Roles: Industry, Government, Academia**



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Exploring CS Careers: Data Scientist

- Use math models to solve real world problems by applying advanced tools to find patterns, create visualizations, and draw conclusions from datasets
- Hard skills: Data analytics, data mining, machine learning & AI, SAS, SQL, R



Essential skills: Communication, biz knowledge, problem-solving, organization of complex projects, data sets

- **Degree: BS in CS or Data Science, some roles require an MS**
- **Salary: \$90-100k (Entry), \$100-120k (Mid), \$136k+ (Experienced)**
- **Roles: Industry, Government, Academia**

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Exploring CS Careers: Video Game Designer

- Create games that run on computers, mobile devices, and gaming consoles
- Develop flowcharts and storyboards, write code, and test with users
- Hard skills: Fluency in C# and C++, analytical skills, graphics, user design, coding within a gaming framework, performance analysis, familiarity with gaming platforms, embedded system knowledge



Essential skills: Teamwork, problem-solving, creativity

Degree: BS in CS

Salary: \$65k+ (Entry), \$78k+ (Mid), \$90k+ (Experienced)

Roles: Industry, Entrepreneurial

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Exploring CS Careers: Security Analyst

- Protect organizational data and systems from cyberattacks
- Install mgmt software, watch for potential breaches, respond to attacks
- Train employees to spot & report phishing attempts
- Hard skills: Blackboard, Apache Ant, Symantec, Django, knowledge of networks and system administration
- Career paths can include Network Architects, Systems Manager, Network Administrator, Software Developer, Information Researcher



Degree: BS in CS or Cybersecurity

Salary: \$60k+ (Entry), \$82k-100+ (Mid), \$110k+ (Experienced)

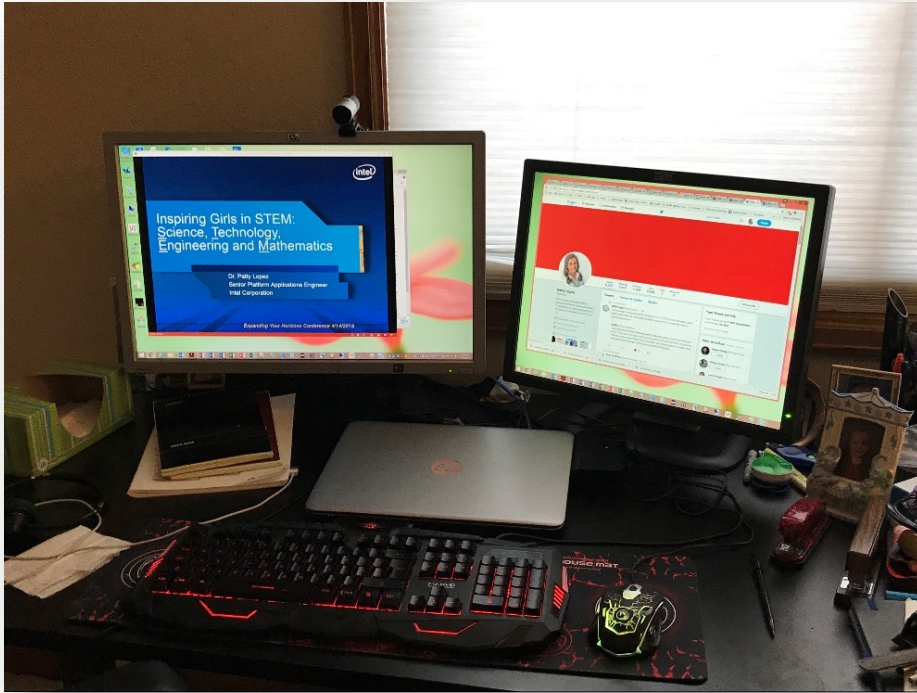
Roles: Industry, Government

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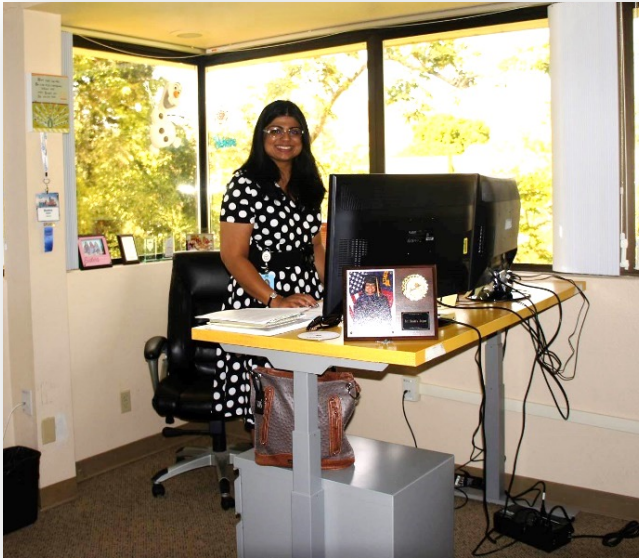


Where I work and play



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Where some of my colleagues work



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Finding a Job You Will Love



What are your superpowers?

- Consider investing in a [StrengthFinders](#) report to identify your strengths and interests in a more general way (\$20)

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How to Navigate Your College Journey

- Visit your local career office on campus, find out which employers come to visit, then look at their websites
- Update your resume, practice your elevator speech, create & update your LinkedIn profile
- Attend the campus career fair and talk to recruiters!
- Visit your department, talk to other students, ask for resources for study groups, used books, tutoring, mentors
- Stop by your instructors during office hours the first few weeks, even if just to introduce yourself. This makes it easy to ask for help later when you may need it
- Join a department student organization or club and get to know people who can share their path

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How to Find Financial Support

- Filled out your FAFSA? Whether you get funds or not, it determines your eligibility for workstudy, grants, & loans
- Apply for scholarships in your department – lots of them go unfunded due to lack of applications
- Check the on-campus job boards for work, ideally in your major , as a lab proctor, an undergraduate teaching assistant, peer mentor, tutor, etc.
- Apply for a Research Experience as an Undergraduate (REU) or an Undergraduate Teaching Assistant

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