

## SUMMARY

I am a Berkeley Math and Computer Science double major with an interest in doing research in cryptography and theoretical computer science. I have 4+ years of programming experience and teaching myself advanced math topics. Using a mix of theoretical and practical skills, I am keen to explore the underlying principles behind computer science.

## PROFESSIONAL EXPERIENCE

UCSD and League of Amazing Programmers  
Web Development Intern

January 2019–March 2022

- Worked on the “Mousetrap” Project, a collaborative effort with the League of Amazing Programmers and UCSD to create an application for better managing lab mice for experiments
- Collaborated with a team of developers, contributing to project planning, implementation and development over GitHub and Slack
- Developed the front-end interfaces of the app with ReactJS and Node JS, enhancing user experience and interface functionality
- Contributed to back-end development of the app with Python server-side logic and Docker instances, enabling efficient database management and calculations

Technology Academy, Ellen Browning Scripps Elementary  
Lead Programming Tutor

July 2018–August 2022

- Worked in an after-school program within E.B.S. Elementary aimed to foster early interest in programming and computer science topics in middle and elementary school students
- Designed and delivered an engaging programming curriculum, introducing programming fundamentals in Java, Python and early Computer Science topics
- Adapted teaching methods to accommodate for the different learning styles of each student, ensuring understanding of complex topics
- Stimulated a positive and interactive learning environment, encouraging student participation and curiosity in computer science

## EDUCATION

UC Berkeley, Berkeley, CA  
Math and Computer Science Major (GPA: 3.8)

Graduating  
5/2027

- CS 61A: Structures and Interpretation of Computer Programs; Math 54: Linear Algebra and Differential Equations

## SKILLS AND AWARDS

- AP Computer Science Perfect Score (ranking in the top 0.47% globally)
- CollegeBoard National Hispanic Scholarship Award
- California Scholarship Federation and National Honors Society (9, 10, 11 and 12th grade)
- Programming Languages:
  - Proficient: Java, Python, C/C++, JavaScript, C#, Lisp (Racket and Scheme), Linux command line, SQL, Go
  - Familiar: Haskell, R, x86 asm, Verilog, OCaml, Rust
- Web Development: NodeJS, ReactJS, Express, HTML and CSS
- Other Technologies: Docker, Git/GitHub, Linux/\*BSD system administration, 3D printing
- Self taught or Experience in Calculus(1, 2 and Multivariable), Linear Algebra, Discrete Math and Abstract Algebra
- Self taught in compiler and programming language design, algorithms and data structures, FPGA circuit design, computer architecture, theoretical CS concepts and cryptography, machine learning and deep learning concepts
- Soft Skills: Communication, Self-motivated, Autodidactic, Problem-solving, Teamwork, Leadership
- Fluent in English and Spanish