# Neema Zahedi

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## Education

**M.S. Computer Science** **Mar. 2022–Jun. 2023**

*University of California, Santa Barbara* *GPA: 4.0*

- Emphasis in Computer Systems; focusing in Computer Architecture research in UCSB's ArchLab

**B.S. Computer Science** **Sept. 2018–Mar. 2022**

*University of California, Santa Barbara* *Computer Science GPA: 3.80*

- Coursework: Computer Architecture, Artificial Intelligence, Machine Learning, Databases, Computer Networks, Software Defined Networking, Data Structures & Algorithms, Operating Systems, Probability and Statistics, Object Oriented Programming, Compilers, Cryptography

## Experience

**HRL Laboratories** **Sep. 2022–Jan. 2023**

*Robotics Software Engineer Intern* *Malibu, CA*

- Prospective intern using ROS to program new functionality for HRL's marine research robot

**Apple** **Jun. 2022–Sep. 2022**

*Headphones, Accessories, and Systems Software Engineer Intern* *Cupertino, CA*

- Piloted prototype and foundation for upcoming Apple Airpods features for IOS, interfacing on the systems and networking level
- Functionality to be extended across Apple ecosystem

**Lenovo** **Jan. 2022–May. 2022**

*Software Engineer Intern* *Remote*

- Constructed front and backends of dynamic user feedback webpages for the Lenovo app (**50,000+ downloads**) using HTML/CSS, JS, Java, and SQL

**Pfizer** **Jun. 2021–Aug. 2021**

*Robotic Software Engineer Intern* *Remote*

- Automated liquid pipetting for the hamilton robotic machine with python scripts and C programming
- Empowered non-technical oriented scientists to perform complex pipetting steps with machine level precision and speed
- Functionality utilized by the mass spectrometry team to aid in **Pfizer's vaccine development** and other operations

## Projects

**CROMCH** | *C++,Python,RISC-V assembly, Spike* **Sept. 2021-Jun. 2022**

- Using C++ to modify SPIKE source code to capture program state information (checkpointing), we analyze and apply a series a of optimization techniques with Python to reduce program size and runtime on a post-compile time basis

**Pamelemma:Automatic Responsive Proof Grader** | *C++, Z3/CVC4, GoogleTest,Docker* **Jan. 2021-Sept. 2021**

- Collaboratively implemented new functionality to UCSB's educational "Mentor" software to **automatically** grade and give responsive feedback to students' proofs for the Automata and Formal Languages class
- Expected use of **200 students annually**, as well as course staff, to facilitate faster and more responsive learning
- On average, student proof feedback calculated to be **2000% faster** compared to manual grading and feedback process, saving **20+** hrs/week for instructors as well

## Technical Skills

**Languages**: C/C++/RobotC, Python, Swift, Java, SQL, JavaScript, P4
**Developer Tools**: GDB,XCode, Docker, Git, VS Code
**Platforms/Frameworks**: GoogleTest, Linux, IOS, React, Z3/CVC4, RiscV, AVFAudio, Apple Network [framework]

## Leadership / Extracurricular

**Robotics Club** **Sept. 2019–Present**

*President (2021-Current)/ Vice President (2019-2020) / Software Lead (2019-2020)* *University of California, Santa Barbara*

- Pioneering **UCSB's largest outreach program** bringing robotics education to **27 classrooms** across 9 schools in Goleta (2021-2022)
- Organized multidisciplinary LoRa rover project, shipping parts to students across California, during the pandemic, for hardware members to collaborate on a quarter long project via "baton passing" the rover parts through mail (2021)

**CodePath** **Jan. 2021–Jun. 2021**

*Techfellow- IOS Instructor* *Santa Barbara, California*

- Co-founded CodePath at UC Santa Barbara, teaching 20+ students IOS design principles and app development with Swift and XCode