

Meigan Lu

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EXPERIENCE

Groq, NPI Test Development Engineer Intern

July 2024 - Present

- Developing automated testing programs for GroqCard accelerators using Python and open-source Linux, streamlining software and firmware configuration and improving production throughput by 3.5x.
- Designing and debugging test suites in GroqNode AI servers to enhance test coverage, identify anomalies, and validate quality standards for serviceability, increasing code reliability and accuracy by 15%.
- Collaborating cross-functionally with the project lead on algorithm optimization, providing critical feedback to eliminate latency and enhance system efficiency, achieving a 20% reduction in runtime.

De Anza College CompTechS Lab, Computer Technical Support Intern

Oct 2022 - Dec 2022

- Assembled and restored 8+ laptops from reclaimed parts to support low-income students and veterans.
- Executed memory and hard drive optimizations to enhance system responsiveness and improve user experience.
- Conducted performance tuning and comprehensive health checks post-software configuration on the Windows operating system, leading to a 46% decrease in BIOS boot time and reduced driver errors.

PROJECTS

Auto-dimming Headlights and Object Detection System | C++, Arduino

Sept 2023

- Engineered an embedded vehicular safety test model in a team of 3 others, integrating auto-dimming headlights and an alarm system feature to identify unforeseen obstacles in a tight 4-day timeline.
- Aided in executing C++ and Arduino for real-time object detection using an ultrasonic sensor, ensuring optimal data range analysis algorithm performance with an 86% detection accuracy.

MegaMart | Java

Mar 2022

- Created a Java-based virtual grocery store in a team of 4 others comprising a user login hashtable database and a user-friendly interface for viewing, sorting, and tracking grocery items and orders.
- Optimized shopping cart heap database for enhanced functionality, enabling editing and deletion of grocery entries.

SKILLS

- **Languages:** Java, C++, Python, Latex, R, Go, JavaScript, HTML/CSS, Linux
- **Tools/Frameworks:** Eclipse, VS Code, PyCharm, Node.js, Git, Figma
- **Transferable Skills:** Communication, Analytical, Problem-solving, Self-driven, Collaboration, Detail-oriented
- **Relevant Coursework:** Data Abstraction and Structures, Object Oriented Analysis and Design, Linear Algebra, Discrete Mathematics, Differential Equations, Algorithm Design and Analysis

LEADERSHIP

Girls Who Code, External Affairs Officer

Sept 2023 - June 2024

- Aided in organizing UC Davis' first hackathon for marginalized groups in STEM, resulting in 100+ attendees.
- Conceptualized and organized strategies, budgets, and promotion plans to enhance and influence public outreach.

Women in Computer Science, Public Relations Manager

May 2022 - June 2023

- Designed event-related graphics, setting quality standards and increasing member engagement by 10%.
- Directed technical workshops using a project-based approach to teach the rudimentary fundamentals of programming and algorithm design using Python.

EDUCATION

University of California, Davis

Davis, CA

Bachelor of Science in Computer Science

Expected Graduation: June 2025

- **Programs & Awards:** CAAA Leadership Scholarship, AvenueE Scholar