Evan Lu

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SUMMARY

Student at UC Merced graduating in May 2026 with experience in hands-on robotics engineering, teaching robotics, as well as web-related development. Proficient in C++, Python, Java, and React JS. Currently doing self-guided research on core robotics platforms such as ROS2.

EDUCATION

University of California, Merced – *Merced, CA*

Bachelor of Science *in Computer Science and Engineering, Minor in Electrical Engineering* *August 2023 – Expected May 2026*

- **Cumulative GPA:** 3.836
- **Relevant Coursework:** Software Engineering, Parallel Computing (C++), Operating Systems (Java), Algorithm Design and Analysis (C++), Circuit Theory, Electronic Circuit Design, Electrical Machines, Probability and Statistics (Python), Advanced Programming (C++), Database Systems Implementation (SQLite & C++), Linear Algebra, Linear Analysis, Physics
- **Awards:** Chancellor's Honor List (2024, 2025), Dean's Honor List (2023, 2024)

Laney College (Dual Enrollment with High School) – *Oakland, CA*

Associate of Science *in Computer Programming* *September 2019 – June 2023*

- **Cumulative GPA:** 3.95
- **Relevant Coursework:** Object Oriented Programming in C++, Data Structures and Algorithms (Java), Microcomputer Assembly Language (x86 ASM & C++), Calculus I-III
- **Awards:** Academic Honor Student *(Laney)*, Outstanding Student, Lifelong Learner, 100 Hours of Community Service *(High School)*

WORK EXPERIENCE

Robotics Instructor

Little Fire Corp. *– Oakland, CA* *August 2025 – Current*

- Prepared different robotics lesson plans suitable for elementary schoolers to high schoolers for both block coding and Python.
- Taught students the concepts of code and robot operation, and designed custom robots to meet the needs of each cohort of students.
- Mentored students while hosting a robot arm development workshop to better foster collaboration and hands-on impact.

I2G Intern

Conectado Inc. *– San Francisco, CA (Remote)* *September 2024 – December 2024*

- Engineered algorithms to use AI text embeddings to improve user recommendation accuracy by 66%. (Node.js, Google Gen AI, Firebase)
- Designed a sort-and-filter algorithm and an intuitive user menu with Material UI to enhance user experience. (React JS, Firebase)
- Collaborated with a team of four interns to integrate LinkedIn features, design a user ranking system, and resolve critical bugs.

Front End Intern

NeuroLeap Corp. *– Costa Mesa, CA (Remote)* *September 2024 – December 2024*

- Devised solutions for efficient image loading from the SQL database based on user interactions. (React JS, TypeScript)
- Implemented try-catch blocks to prevent 100% of image-loading-related crashes, enhancing stability and user experience.

PROJECTS

Lead Programmer

FRC Robotics *– The Aztechs* *September 2021 – May 2023*

- Programmed FRC competition robots, *WWURM* and *H-enry* (Winner of CalGames 2023), in Java and Kotlin respectively.
- Developed methods for automatic aiming, balancing, and positioning beyond human driver capabilities on both robots, giving us more points on average per round and more consistent point scoring, leading to victory at CalGames for *H-enry*.
- Led coordinated robot integration sprints with two junior programmers to help them learn, contributing to the team's future successes.

Robot Hand

Personal *January 2023 – May 2023*

- Built a rock-paper-scissors and motion-emulating robot out of laser-cut wood using a Raspberry Pi and Python code.
- Developed a parallelized hand gesture recognition pipeline with OpenCV and MediaPipe, reducing the response latency to less than 100ms.

Exosky

Hackathon *– NASA SpaceApps 2024* *October 2024*

- *Local Challenge Winner* at UC Merced, *2024 Global Nominee*, and *2024 People's Choice* for the NASA SpaceApps Challenge.
- Created a Flask backend to read celestial coordinates and star data from the Gaia database and simulate the sky view from other planets.

SKILLS

- **Programming:** C++, Python, Git/Github, Java, Kotlin, SQL, React JS, CSS, JavaScript, TypeScript, x86 ASM, Linux CLI
- **Robotics Focus:** Raspberry Pi, Arduino, OpenCV, MediaPipe, Robot Kinematics, ROS2, Real-Time Systems
- **Languages:** English, Mandarin Chinese