

# AARON ZHENG

ML and Robotics Enthusiast, Full Stack Software Developer, and College Student



## Education:

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**University of California Berkeley** B.S *Electrical Engineering and Computer Science.* Aug 2022 - May 2026

**Bachelor's Degree**

**Major GPA: 3.95**

**Coursework:** Computer Architecture, Designing Information Devices and Systems, Data Structures, Signals and Systems, Discrete Math and Probability Theory, Advanced Circuits, Economics, Optical Engineering.

## Experience:

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**AI Intern** - Uniphore (Jun 2024- Present)

- Created LLM guardrails + topic classifier through fine tuning
- Guardrails used by company for their enterprise-facing chatbot

**Hybrid Robotics at Berkeley** — Researcher under Professor Koushil Sreenath (Jan 2024 - Jun 2024)

- Working on replicating project allowing quadruped robot to balance on yoga ball for more than 25s (average)
- Assisted researchers to use Q-Learning to train 4-legged quadruped robot to kick a ball

**Peer Leadership Consultant / Admin** — Undergraduate Student Employee (June 2023 - Present)

- 10 hours / week staffing, answering questions relating to student club registration on Berkeley campus.
- Developing course / training website using Rust, Axum and Google OAuth for 3000+ student signatories of UC Berkeley clubs and organizations, ensuring that they are informed on responsibilities.

**OpenARK Wearable Augmented Reality System** - Student Researcher (Oct 2023 - Jan 2024)

- Implemented (with team) a real-time digital-twin tracking effect with ground-truth labels (video see-through solution) or DTTD2 inferences (AR solution, if our algorithm can be deployed with TensorRT soon).
- Used Foxglove to visualize robotics image data from autonomous rovers.

**JIPCAD** — Undergraduate researcher under Professor Carlo Sequin (Sep 2022 - Jan 2024)

- Independently developed language extensions for programming language used to build 3D-CAD models on JIPCAD, a Computer-aided design tool for sketching free-form surfaces
- Added functionalities to JIPCAD, including shelling, offset, customized graphics and merge, allowing user to thicken two dimensional models, grid models along edges, and render each face in distinct colors

**Ivoyant** — Language Engineering Intern (June 2023 - Aug 2023)

- Built and debugged parser and language models to analyze JSON files with user data.
- Maintained data-mapping app, mapped source and target schemas based on parsed user-input expressions.

**Star Technology and Rocketry at Berkeley** — Avionics Engineer (Sep 2022 - March 2023)

- Used EDA(Kicad) to sketch PCB. Collected sensor data from altimeters and accelerometers to control custom-designed airbrakes systems with PID through an Arduino microcontroller.

**Phocabulary** — Lead Developer (Mar 2022- Aug 2022)

- Created education app allowing children to learn surroundings with object detection; used transfer learning to allow app to detect 90+ objects. Presented at Hong Kong Youth AI Conference.

## Skills:

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**Programming Languages:** C, C++, C\*, Python(Numpy, Scikit Learn, Matplotlib, OpenCV), Java, Tensorflow, Keras, Node.js, React, Rust, Antlr, JSON, Handlebars.js, Javascript, SQL, Scheme

**Tools:** Solidworks, Blender, Matlab, JIPCAD, VS Code, Git. Visual Studio, Android Studio, Xcode