Eric Chen

erchen22@stanford.edu | 626-818-8781 | Palo Alto, CA | US Citizen

EDUCATION

Stanford University, Stanford, CA — June 2026
M.S. Computer Science | Specialization: Artificial Intelligence

Harvey Mudd College, Claremont, CA — May 2024
B.S. Computer Science and Math | Concentration: Economics (*High Distinction)* | NSF GRFP *Honorable Mention* — GPA: 3.9/4.0

SKILLS

- Proficient in: JavaScript, Java (Spring), Python, C/C++, TypeScript, React, SQL, AWS, Bash, HTML, CSS, ROS, Git
- Working Experience with: Haskell, Swift, Docker, MongoDB, Agile development

Relevant Coursework

- **Completed**: Operating System, Big Data Databases (Postgres + MySQL), Neural Network, Computer Vision (CV), Microprocessor Design, Mathematics of Big Data, Operations Research, Linear Algebra, Statistics, Computer Systems (**TA**)
- **Planned Fall 2024**: CV + Biomedicine, Machine Learning with Graphs, Machine Learning Systems, Parallel Computing

RELAVANT PROJECT EXPERIENCE

OpenAI Chatbot with Tools ("Functions, Tools, and Agents with LangChain" Coursera course project) — September 2024

- Developed an OpenAI-powered agent using LangChain capable of calling APIs for up-to-date data like Weather (Open-Meteo) and Wikipedia articles while interacting with users through a GUI (Planning more llm-agent projects!)

SOFTWARE ENGINEERING EXPERIENCE

Software Development Engineer Intern, Amazon *Seattle, WA* — June 2024 – August 2024

- Designed and implemented features on Amazon.com's new and legacy global selling pages shipped to over 1 million sellers.
- Created an experience assignment feature based on **A/B testing** to control the version of the page rendered and a toggling feature to switch between experiences using **React, Java Spring Boot, JSP** with localization and testing **(Junit, Jest, etc)**.
- Derived requirements with engineers across two teams to optimize seller experience and collect informative metrics. These metrics were extracted using **SQL** into monthly CSV reports to help product managers better understand user preferences

Software Engineer (Fall) → **Project Team Lead (Spring), Wayfair Next** *Claremont, CA* — August 2023 – May 2024

- Led a team of five Harvey Mudd students to streamline Wayfair's product digitization pipeline using the latest **augmented reality and radiance field** technologies with **app, server, and web** deliverables.
- Collaborating with three team members to develop an **iOS** app leveraging **ARKit and Swift** to help Wayfair suppliers collect data more easily with **AR guidance** and implementing **REST APIs** using **node.js.**
- Effectively led task distribution, organized weekly meetings with Wayfair, and presented to the co-founder of Wayfair.

Software Development Engineer Intern, Amazon *Santa Clara, CA* — May 2023 – July 2023

- Designed a new GraphQL **infrastructure** to supplement existing REST APIs to enhance data access, replacing two of the six key REST APIs called hundreds of times in production and enabling widgets in upcoming UI updates.
- Developed **GraphQL backend** (schema and resolvers) using **AWS services**, and implemented authentication methods, with **testing, automated deployment, and monitoring** using **Python and TypeScript** (completed ahead of schedule).
- Created **UI** components and integrated GraphQL API calls on the **front end** using **React, Apollo Client, and TypeScript**.

MACHINE LEARNING EXPERIENCE

Computer Vision Research Intern, Air Lab at Carnegie Mellon University *Pittsburg, PA* — June 2022 – May 2024

- Developed a multi-modal system using **LiDAR and Camera data** for fast adapting long-range traversability estimation, addressing the challenge of limited training data in off-road environments, advised by Professor Sebastian Scherer.
- Extended the CMU DARPA RACER team's complex **autonomous vehicle** stack and implemented key features for label generation from point cloud data and online training of an ensemble of **computer vision** models using **ROS and PyTorch.**
- Conducted experiments with off-road scenes to show the effectiveness of our online continual learning method (**IROS 2024 co-first author** | *Learning-on-the-Drive: Self-supervised Adaptation of Visual Offroad Traversability Models*).

Machine Learning Research Intern, AMISTAD Lab at Harvey Mudd College *Claremont, CA* — May 2021 – May 2024

- Collaborated with Professor George Montañez and two undergraduate students to develop a method for **vectorizing machine learning classifiers**, addressing the lack of model comparison techniques that incorporate bias analysis.
- Wrote **object-oriented** code to generate vectors and automated job-running on a server to produce JSONs and plots.
- Compared vectors using clustering, dimensional reduction, and **data visualization** tools (**Seaborn, Sklearn**) and published a **first-authored** paper (***Vectorization of Bias in Machine Learning Algorithms***) accepted to **ICAART 2022**.