

Eric He

425-658-6668 | eriche26@stanford.edu | [linkedin.com/in/eric-he-sea](https://www.linkedin.com/in/eric-he-sea) | github.com/eric8he

EDUCATION

Stanford University

B.S. in Computer Science | Artificial Intelligence Track

Stanford, CA

Sep. 2022 – June 2026

EXPERIENCE

Research Intern

Machine Learning, Perception, and Cognition Lab

June 2024 – Present

San Diego, CA (Remote)

- Improved Vision-Language-Action models by upgrading data quality, guided by Dr. Zhuowen Tu (UC San Diego).
- Created a data pipeline with PyTorch/TensorFlow to train and finetune transformer models using **20+** datasets.
- Developed custom transforms for data augmentation and filtering to create **1M+** new higher-quality data points.
- Finetuned the OpenVLA model using Low Rank Adaptation (LoRA), evaluating with SimplerEnv.

Software Engineering Intern

NewsBreak

June 2023 – Sep. 2023

Bellevue, WA

- Built an end-to-end system generating moderative comments on videos to reduce comment polarization by **50%**.
- Using the OpenAI API, generated effective comments with token-efficient prompts that saved **35%** in costs.
- Built a RESTful service with MongoDB and Flask to scout for content and manage **100+** user profiles.
- Utilized Jenkins for CI/CD and leveraged Apache Airflow to manage scheduling, enabling **500+** comments daily.

Software Engineering Intern

Wormpex AI Research

July 2022 – Sep. 2022

Bellevue, WA

- Trained Vision Transformer (ViT)-based image classification models using PyTorch across multiple CUDA GPUs.
- Programmed with BeautifulSoup, scraping webpages to construct six datasets totaling over **100,000** images.
- Tuned model hyperparameters and adjusted data to outperform the first-week prototype accuracy by **200%**.

PROJECTS

RCTimer | *React, Bootstrap*

- Developed a polished web application to track times, generate scrambles, and view statistics for speedcubing.
- First in the world to natively feature an interactive 3D cube model to view scrambles, algorithms, and cube states.
- Utilized local storage and Google Drive integration to provide robust data tracking and backup.

8-Bit Breadboard Computer | *Machine Code/Assembly, Digital Circuits*

- Originally designed, prototyped, built, and polished a Zilog Z80-based computer on breadboards.
- Wired power, I/O, memory management, and display modules by hand with discrete logic gates.
- Programmed in binary using onboard DIP switches, displaying the Fibonacci sequence on 7-segment displays.

South Fork Minerals/Northwest Mineral Collective | *JavaScript, CSS*

- Scaled business mining/prepping/selling mineral specimens globally to 6 figures from the ground up.
- Built Squarespace website with nonnative JS/CSS to create a custom design that tripled shopper engagement.
- Owned, managed, and mined three 20-acre federal mining claims on USFS land in Washington.

GeocornerGuessr | *PyTorch*

- Built and fine-tuned four separate CNN regression models for small-scale local geolocation using PyTorch on GCP.
- Wrote a Python script to fetch 16K+ images from a specified area using the Google Maps Street View API.
- Applied an Image Retrieval VPR system with a CNN for a **15x** performance boost from pure CNN regression.

TECHNICAL SKILLS

Languages: Python, Java, C/C++, SQL, JavaScript, JSX, HTML/CSS, C#

Frameworks: React, Node.js, Flask, FastAPI, Bootstrap, Squarespace, .NET

Developer Tools: Git, Docker, Airflow, Jenkins, Unix/Linux, Google Cloud Platform, Amazon Web Services

Libraries: PyTorch, TensorFlow, pandas, NumPy, matplotlib, BeautifulSoup