

Eliot Hall

San Jose, CA | christopher.e.hall@sjsu.edu | [in/christopher-eliot-hall](https://github.com/chrehall68) | github.com/chrehall68 | chrehall68.github.io

Education

San Jose State University

August 2023 - Present

- Freshman pursuing a BS in Computer Science; graduating Fall 2026; 4.0 GPA
- Took "Data Structures and Algorithms"

MIT Beaver Works Program

June 2022 - July 2022

- Earned the "Dr. Bob Berman Award" for creating personalized explanations and examples to assist other students
- Developed an AI to play a zombie outbreak game using OpenAI gym and Stable Baselines PPO algorithm

Work Experience

Research Assistant - San Jose State University

October 2023 - Present

- Collaborate with Dr. Vishnu Pendyala to prepare a paper on NLP for NeurIPS
- Investigate novel approaches to LLM misinformation classification and containment using CNNs and transformers
- Identify, analyze, and visualize factors that contribute to LLMs' ability to generate misinformation

Open Source Contributor - KISS Institute for Practical Robotics

March 2022 - August 2023

- Refactored and debugged the robotics firmware, ultimately enabling passing CI/CD builds
- Incorporated student feedback into UI development, creating a more user-friendly web UI with Angular JS
- Collaborated with KIPR employees to add networking capabilities to the C++ QT-based controller UI

Python Project Lead, Enoch Project Lead - Code 4 Tomorrow

March 2020 - May 31, 2023

- Built Enoch, an app that automated student registration using Google APIs, saving volunteers 8+ hours per week
- Recruited and managed a team of five volunteers to design new course content and maintain Enoch
- Designed and taught courses in advanced Python tailored to the needs of younger students

Personal Projects

Stanford Ribonanza RNA Folding Competition

October 2023 - December 2023

- Collaborated with two others to model RNA 3D structures, outperforming 700+ teams and winning a silver medal
- Reduced model MAE by over 50% by writing a custom transformer in PyTorch and parallelizing our training loop
- Designed a 75% faster data preprocessing pipeline to extract meaningful features, further reducing model MAE

IHSBoost

January 2023 - April 2023

- Utilized CMake to create a C++ library with Python bindings for my robotics team, enabling faster prototyping
- Implemented custom threading, sensor, and movement classes, facilitating modular, object-oriented software
- Deployed a CI/CD pipeline to auto-deploy documentation to GitHub Pages and build the Debian package

IBM Z Datathon

October 2023

- Fine-tuned a BERT model and deployed a minimized version of it on IBM Z systems, winning a silver medal
- Collected, cleaned, and modified a hate-speech dataset, weighting labels to counter its label imbalance