

└ (408) 324-6330 | ☑ henrymtrinh14@gmail.com | **☆** henrytrinh.xyz | **۞** thenry3 | **in** thenry3

Education _____

University of California, Los Angeles

Los Angeles, CA

B.S. Computer Science, Major GPA: 3.8

September 2018 - June 2022

Courses

Deep Learning, Data Structures, Algorithms, Operating Systems, Computer Graphics

Experience _____

Snap Inc.Los Angeles, CA

Software Engineer Intern September 2021 – Present

• Creative Tools

Two Sigma New York, NY

Software Engineer Intern — C++

June 2021 – August 2021

- Built high performance server for ingesting market data and calculating NBBO quotes for options, improving trading speed by 300%
- · Implemented server logging to track metrics such as number of quotes ingested and latency times
- Wrote scripts for generating test data and end-to-end integration testing

Nuro Mountain View, CA

Software Engineer Intern — Python

- Optimized routing algorithm for mapping roads using integer programming, reducing cost per square mile by 30%
- Reduced number of difficult turns and redundant loops for mapping operators by 90% using graph optimizations
- Implemented route visualization tool to analyze route metrics and efficiency

Tesla Palo Alto, CA

Software Engineer Intern — C++

September 2020 - December 2020

March 2021 - June 2021

- · Released new search feature for locating close amenities surrounding a user-selected Supercharger, requested by thousands of drivers
- · Programmed an algorithm to allow drivers to search for places along their route, optimizing total trip time by minimizing detours
- · Developed navigation feature for drivers to create and edit trip waypoints with battery management
- Enhanced driver experience by fixing firmware bugs within maps and navigation in vehicles

Amazon Seattle, WA

 ${\bf Software\ Development\ Engineer\ Intern-TypeScript,\ Java,\ AWS}$

June 2020 – September 2020

- $\bullet \ \ \text{Improved scalability and performance for console infrastructure by migrating to serverless architecture}$
- $\bullet \quad \text{Constructed new pipeline for automated, progressive deployments of certificate manager service with automatic rollbacks to prevent broken releases}$
- · Established server logs and latency metrics to increase ease of maintenance of the Certificate Manager console

Center for Vision, Cognition, Learning, and Autonomy

Los Angeles, CA

 ${\sf Research\,Assistant-Python,\,PyTorch}$

April 2020 – October 2020

- Researched path planning and trajectory prediction for autonomous vehicles using deep learning
- Implemented LSTM neural network with social pooling to determine possible trajectories of human movement in dense crowds
- · Created tool to preprocess raw data into loadable binary files, improving data pipeline performance and saving minutes of processing time

Skills _____

Languages Python, C/C++, Java, JavaScript, TypeScript, SQL, HTML, CSS

Frameworks + Tools React, PyTorch, MongoDB, Django, Node, Git, Docker, OpenCV, mySQL, PostgreSQL, Numpy

Technologies Full Stack, Android, Databases, Machine Learning, Computer Vision, SLAM