

# Henry Trinh

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## Education

### University of California, Los Angeles

B.S. Computer Science, Major GPA: 3.8

Los Angeles, CA

September 2018 – June 2022

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

## Experience

### Snap Inc.

Software Engineer Intern

Los Angeles, CA

September 2021 – Present

- Creative Tools Rankings

### Two Sigma

Software Engineer Intern — C++

New York, NY

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

Software Engineer Intern — Python

Mountain View, CA

March 2021 – June 2021

- 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

Software Engineer Intern — C++

Palo Alto, CA

September 2020 – December 2020

- 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

Software Development Engineer Intern — TypeScript, Java, AWS

Seattle, WA

June 2020 – September 2020

- Improved scalability and performance for console infrastructure by migrating to serverless architecture
- 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

Research Assistant — Python, PyTorch

Los Angeles, CA

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