Los Angeles Metropolitan Area

## **Education**

#### **University of California, Irvine**

Irvine, CA

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

September 2016 - June 2020

- Cumulative GPA: 3.85/4.00 (Cum Laude honors)
- · Relevant coursework: Data Structures, Design/Analysis of Algorithms, Project in Algorithms, Database Management, and Operating Systems

## **Experience**

Flexport San Francisco, CA

SOFTWARE ENGINEER INTERN

January 2020 - April 2020

Increased accuracy of carrier contracts by 72% by implementing additional automated data checks to eliminate false positives.

- Automated process of digitizing 6500+ documents sent by carriers monthly by building an email processor; reduced workload of ocean freight
  operations and saved roughly 40 hours/week in operational time.
- Projected to prevent net revenue leakage by \$20 million by optimizing contract parsing algorithm, resulted in detecting errors in 2% of all ocean carrier contracts.
- Implemented a routing algorithm to efficiently compute route changes and swiftly notify affected parties when a carrier changes its initial route.
- Decreased time spent per contract by 40% by creating a new workflow queue and dashboard filled with internal self-serve tools.

### **NASA Jet Propulsion Laboratory (JPL)**

Pasadena, CA

FLIGHT SOFTWARE ENGINEER CO-OP

September 2019 - December 2019

- Enabled engineers to perform and visualize nominal rover mobility such as arm and turret command sequences on the Mars 2020 rover by implementing surface flight software in a web application.
- Increased the accuracy of position and altitude calculations during simulation by integrating 3D meshes generated from stereo imagery collected by the rover.
- · Discovered over 20 command sequences that caused failures in the rover by executing fuzz tests daily.

Amazon Seattle, WA

SOFTWARE DEVELOPMENT ENGINEER INTERN

June 2019 - September 2019

- Developed remote procedure call to generate translation sidecars to allow Kindles to perform text text translations an internet connection.
- Scaled application to generate translation sidecars for over 200 digital books and 25 different languages within 12 minutes by using threads to retrieve and store translations in batches.
- Increased speed to fetch and display translation results to 1.5 seconds by developing a new Kindle API to support local translation sidecars.

### **Siemens Digital Industries Software**

Cypress, CA

SOFTWARE ENGINEER CO-OP

January 2019 - May 2019

- Increased user flexibility to select and execute different tests on CAD files by building a centralized inspection tool that efficiently utilizes aspects
  of multiple internal services.
- Optimized inspection tool's scalability by restructuring library content and migrating over 20 legacy constructs.

**Spetcial** Sunnyvale, CA

SOFTWARE ENGINEER INTERN

October 2018 - January 2019

- Led frontend infrastructure overhaul by rolling out new modular React components to be utilized throughout the web application.
- Enhanced application's page loading speed by 42% by implementing resource splitting and lazy loading.

# **Projects**

#### Coderpad

TECHNOLOGIES USED: PYTHON, FLASK, DOCKER, AWS, REACT.JS

- · Deployed a collaborative coding platform to allow users to simultaneously write, edit, and execute code.
- Built a source code executor API to compile and execute Python, Java, and C++ source code and transmit results of the compiled code along with any build and runtime errors.

#### **Pastebin**

TECHNOLOGIES USED: PYTHON, FLASK, MYSQL, AWS, REACT.JS

- Designed a text storage application to allow users to create, upload, and share snippets of text or code through uniquely generated links.
- Configured backend to efficiently generate a UUID for each paste to avoid duplication and collisions; scaled to optimally store and retrieve thousands of records.

# Skills

**Languages** Python, Java, JavaScript, SQL, Ruby, C++, Bash

Frameworks React.js, Node.js, GraphQL, Spring MVC, Rails, Flask, JUnit, Mockito, pytest, PyTorch, NumPy, Matplotlib

**Tools** Git, Docker, Kubernetes, AWS, Linux