# **Danny Pham**

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# **EDUCATION**

### UNIVERSITY OF CALIFORNIA, IRVINE

Irvine, CA

Bachelor of Science, Computer Science (GPA: 3.84/4.00)

Sep 2016 - Jun 2020

## **EXPERIENCE**

Software Engineer Intern

FLEXPORT, INC.

San Francisco, CA

Jan 2020 - Apr 2020

- Optimized contract validation tool by integrating additional automated data checks to eliminate false positives; increased accuracy of carrier contracts to 72% to ultimately achieve and exceed company quarter OKR.
- Automated process of uploading and digitizing documents sent by carriers using **Rails** to reduce the workload of the ocean freight operations team; uploaded 6500+ documents monthly and saved roughly 40 hours per week in operational time.
- Improved contract parsing algorithm using **Ruby** to more accurately select base freight rates and shipment surcharge costs to assist the carrier dispute process; projected to detect errors in 2% of all ocean contracts, increasing net revenue by \$20 million.
- Implemented routing algorithm to compute and resolve vessel voyage differences when changes are submitted by a carrier in order to immediately notify affected parties.
- Developed a new workflow process and dashboard filled with self-serve tools in **React.js** and **GraphQL** to allow global procurement operations to automate and perform carrier contract digitization and uploads; decreased time spent on each contract by 37.4%.

#### NASA JET PROPULSION LABORATORY

Pasadena, CA

Flight Software Engineer Intern

Sep 2019 - Dec 2019

- Implemented surface flight software using **React.js** and **Redux** to allow engineers to perform and visualize high-fidelity simulation of nominal rover mobility such as arm and turret command sequences in a web application.
- Integrated 3D meshes generated from stereo imagery collected by the rover in C++ to perform position and altitude estimates during the simulation.
- Automated fuzz tests using **Python** and cron jobs; executed approximately 160 different simulations daily which resulted in discovering 20+ command sequences that led to failures.

AMAZON

Seattle, WA

Software Development Engineer Intern

Jun 2019 - Sep 2019

- Built a remote procedure call in **Java** to generate translation sidecars to enable Kindles to perform text translations without internet connectivity; scaled to support over 200 digital books and 25 languages.
- Developed a Kindle API in C++ to detect local translation sidecars and efficiently fetch and display results within 1.5 seconds.
- Integrated concurrency using threads to perform translations in batches; reduced total sidecar creation time by 84%.

#### SIEMENS PLM SOFTWARE

Cypress, CA

Software Engineer Intern

Jan 2019 - May 2019

- Built a centralized inspection tool in C++ that utilizes aspects of multiple internal services to provide users with the flexibility to select and execute different actions and access results in a single consolidated system.
- Optimized inspection service's scalability by restructuring library content and migrating over 20 legacy constructs.

# **PROJECTS**

**CODERPAD** 

coderpad.dannyhp.com

- Deployed a web-based collaborative coding platform on AWS to allow users to simultaneously write, edit, and execute code.
- Built a source code executor with **Python** and **Docker** to compile and execute a either Python, Java, or C++ source code.
- Designed a RESTful API to transmit results of compiled user code along with any build and runtime errors.

**PASTEBIN** 

pastebin.dannyhp.cor

- Launched a text storage application on AWS to allow users to create and share snippets of text through uniquely generated links.
- Designed system to generate UUID for each paste in order to avoid duplication and collisions; configured database to optimally store and retrieve thousands of records.

## **SKILLS**

- Programming: Python, Java, C++, Ruby, SQL, JavaScript, HTML, CSS, Bash
- Frameworks and Libraries: React.js, Node.js, GraphQL, Spring, Rails, Flask, Mockito, JUnit, pytest, PyTorch, NumPy, Matplotlib
- Tools: Agile, Git, Docker, Kubernetes, AWS, GCP, Apache, NGINX, Datadog, Periscope