Danny Pham

phamhdanny@outlook.com | github.com/dannyhp1 | linkedin.com/in/dannyhp1 | 714-383-5113

EXPERIENCE

AMAZON
Los Angeles, CA
August 2020 - Present
Software Development Engineer

- Led the redesign of motion zones for Ring camera devices by redefining the schema, implementing support for backwards compatibility, defining strategy to handle new requirements, and handling data backfills
- Implemented a universal device model to unify 70+ Ring devices to replace repetitive and duplicative code changes with configuration-driven code, reducing time spent on onboarding new settings and devices by 75%
- Designed and implemented APIs for universal schedules, a service that allows neighbors to control recurring schedules related to lights, motion and chimes
- Created a collection of dashboards and alarms to track service metrics and notify the team when an issue occurs

FLEXPORT
San Francisco, CA
January 2020 - April 2020
Software Engineer Intern

- Automated digitization of all documents sent by carriers by implementing an email processor to save roughly 40 hours/week in operational time
- Increased accuracy of extracted carrier contract data by 30% by analyzing data to establish a threshold to detect unexpected price fluctuations
- Integrated pattern recognition into contract parsing algorithm to detect errors in 2% of existing carrier contracts resulting in an expected net revenue increase of $20 million
- Developed a new workflow queue filled with self-serve tools to boost productivity of non-developers by 40%

NASA JET PROPULSION LABORATORY (JPL)
Pasadena, CA
September 2019 - December 2019
Flight Software Engineer Intern

- Implemented validation tests to verify execution of rover command sequences for the Mars 2020 rover
- Integrated surface flight software into a web application to allow scientists to visualize rover mobility
- Increased accuracy of rover position and altitude estimates by 7% by integrating 3D meshes generated by stereo imagery
- Introduced fuzz testing to surface flight software that led to the discovery of 15+ fatal bugs

AMAZON
Seattle, WA
June 2019 - September 2019
Software Development Engineer Intern

- Delivered catalog of 120+ eBooks with translations to 500+ students in non-English speaking countries
- Designed a RPC service to generate translation files for eBooks to allow Kindles to perform translations offline
- Minimized time needed to generate translation files for the digital catalog by 72% (45 mins to 12 mins) by using threads to perform operations in batches
- Built new API for Kindles to support local translation files and process them to display translations in 0.6 seconds
- Expanded service to support 7 additional languages and researched into using a ML model to perform translations on the fly

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE
Irvine, CA
September 2016 - June 2020
B.S. Computer Science, Cum Laude Honors

SKILLS

- **Languages:** Python, Go, Java, JavaScript, TypeScript, Ruby, SQL
- **Frameworks:** React, Express, Socket.io, GraphQL, Rails, Flask, Protocol Buffers, Selenium, PostgreSQL, Kafka
- **Tools**: Git, gRPC, Docker, Linux, AWS (CDK, ECS, EC2, DynamoDB, Kinesis, Lambda)