

Danny Pham

Software Engineer / Los Angeles, CA
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EXPERIENCE

AMAZON

Software Development Engineer

Los Angeles, CA
08/2020 - Present

- Drove migration from Postgres to DynamoDB to use a single table design in order to reduce 2 database calls to 1, resulted in approximately 45% less latency for upstream services
- Led the redesign of motion zones for camera devices by defining the strategy to integrate new requirements, redesigning the schema, implementing backwards compatibility, and handling data backfills
- Implemented a universal device model to unify 70+ Ring device types to replace repetitive and duplicative code changes with configuration-driven code
- Designed and implemented APIs to support universal schedules, a service that allows neighbors to create custom schedules to control settings related to lights, motion and chimes

FLEXPORT

Software Engineer Intern

San Francisco, CA
01/2020 - 04/2020

- Automated digitization of documents sent by carriers by implementing an email processor, resulted in saving roughly 40 hours/week in operational time
- Increased accuracy of data extracted from carrier contracts by 30% by analyzing and using data to establish thresholds to detect unexpected price fluctuations
- Integrated pattern recognition when parsing contracts to detect errors in roughly 2% of existing carrier contracts, expected to increase net revenue by \$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)

Flight Software Engineer Intern

Pasadena, CA
09/2019 - 12/2019

- Integrated surface flight software into a web application to allow scientists to visualize rover mobility
- Introduced fuzz testing into the surface flight software, resulting in the discovery of 15+ fatal bugs
- Increased accuracy of rover position and altitude estimates by roughly 7% by integrating 3D meshes generated by stereo imagery

AMAZON

Software Development Engineer Intern

Seattle, WA
06/2019 - 09/2019

- Designed a RPC service to generate translation files for eBooks to allow Kindles to perform translations offline
- Minimized time to generate translation files by 72% by using threads and performing operations in batches
- Built a new API for Kindles to support local translation files and fetch and display translations within 0.6 seconds

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE

B.S. Computer Science, Cum Laude Honors

Irvine, CA
09/2016 - 06/2020

SKILLS

- **Proficient with:** Python, Go, Java, Ruby, JavaScript, TypeScript, React.js, Node.js, Flask, SQL, noSQL, Git, AWS (EC2, DynamoDB, Kinesis, Lambda, SNS, SQS), Kafka, Protocol Buffers, Agile Development, Linux
- **Familiar with:** GraphQL, Kubernetes, Docker