Lee Ma

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Skills

Languages: Javascript, Python, C++, PHP, Java, C, SQL, VHDL, Swift

Tools and Frameworks: React, Redux, Node, MongoDB, AngularJS, AWS, Git, Redis, Kafka, SocketIO

Education

University of Waterloo   Sept 2017 - May 2022

- BASc in Computer Engineering

Experience

Facebook (IG Media Infra) | SWE Intern - Remote   Sept 2021 - Dec 2021

- Worked on scaling software solutions for animated thumbnail and video scrubbing frame generation and storage, reducing storage size for frame images by 80% on average
- Built E2E experiment framework for animated thumbnail generation, allowing faster config iteration by Reels team, removing 100% of effort from my team to support Reels thumbnail A/B experiments
- Completed infra migration from legacy async job to ad-hoc service for frame generation, deprecating all usages of legacy job along video upload path used by 100% of IG users
- Built new dashboards for monitoring animated thumbnail and video scrubbing frames generation, revealing >90% reliability of generation service and allowing faster response time for problems

Amazon (AWS Marketplace) | SDE Intern - Remote   Sept 2020 - Dec 2020

- Designed and implemented brand new customer-facing UI to streamline workflow for sellers publishing products into Marketplace catalog
- Launched UI to private beta at end of internship, deprecating manual self-service publishing workflow and enabling the transition to new systems that are 175% faster than previous systems
- Created detailed design document, development guide, workflow diagrams, and ops runbook for UI ensuring knowledge transfer for new and existing team members to build and maintain project

Wayfair (Loyalty and Rewards) | SWE Co-op - Boston   Jan 2020 - Mar 2020

- Built gift card invoicing service, allowing for full deprecation of legacy system bottlenecking multiple engineering teams, additionally saving up to 8 hours of engineering and accounting workload a month
- Created features for internal tools used by various teams saving ~2 hours/day of ops work for my team

RiverPay | Software Engineering Co-op - SF Bay Area   May 2019 - Aug 2019

- Implemented signature based auth service from scratch, securing data of 2000+ merchants
- Created merchant-facing payment API wrapper utilizing serverless microservices with AWS Lambda

Bonfire Interactive | Software Engineering Co-op - Kitchener   Sept 2018 - Dec 2018

- Developed and maintained proactive issue detection tool in Python, reducing client support load ~25%
- Resolved multiple security issues in core app, including XSS vulnerabilities and leaking data