Edward Huang

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EDUCATION

University of Michigan (Ann Arbor, MI)

May 2022 GPA: 3.74

B.S.E. Computer Science; Minor: Statistics

Michigan Hackers (iOS Lead), MHacks Core, Undergraduate Research Opportunities Program

WORK EXPERIENCE

Amazon Web Services New York, NY

Software Development Engineer, Foreign Exchange

September 2022 – Present

- Designed the migration plan of disbursements from one method to another utilizing dual writes with shadow read/writes, feature flags, and data backfills with the project scope spanning 15+ services across multiple teams
- Created a multi-medium communication system spanning the software lifecycle including design, implementation, testing (unit, integration, functional, E2E, and load tests), security review, operational readiness review, and launch
- Developed a feature for AWS's customer communication service that delivers an aggregated, business use case specific report of bounced emails. E2E-tested the feature according to a business use case that required extensive planning, setup, and execution, spanning the domain of six microservices
- Planned and executed the migration of manual to IaC-managed infrastructure of an active production system while ensuring 0% downtime, and extended the system to a new region by configuring components such as infrastructure, hosts, VIPs, and certificates. This project is crucial to development efficiency and automating region builds
- Migrated long-term credentials to regionalized ephemeral credentials, increasing security and durability of the service

Amazon Web Services Seattle, WA

Software Development Engineer Intern, Payment Processing

May - August 2021

- Designed, implemented, and deployed to production a foreign exchange rate monitoring and alerting system to ensure updated rates are served to customers
- Led team design review meetings, evaluated technical tradeoffs between designs, and ensured exceptional code quality
- Utilized CDK to provision system infrastructure as code (IaC) for scalability to multiple regions globally
- Wrote integration and unit tests using mocking and dependency injection with Mockito and Google Guice achieving 88% code coverage

Michigan Medicine Ann Arbor, MI

Research Assistant

October 2019 - April 2020

Developed website served on Amazon Web Services displaying electrocardiograms (ECG) to improve accessibility for Michigan Medicine doctors to thousands of patient ECG records

Wonders Information Company

Shanghai, China

Full Stack Intern

May - July 2019

- Implemented website registration functionality and construction project review system serving millions of users
- Identified, documented, and fixed bugs through testing of website and created mockups for new features

RollOut Deliveries Ann Arbor, MI July – September 2018

iOS Software Engineering Intern

Achieved minimum viable product peer-to-peer food delivery iOS application in 12 weeks

Designed and implemented Uber/Lyft-style map UI using Google Maps, online shopping flow, and facilitated implementation of transactions using the Stripe API

SKILLS

Languages: Java, TypeScript, Python, C++, SQL

Technologies/Frameworks: Git, AWS, Dagger, Mockito, Django, Firebase, LaTeX, Flask, Heroku, PostgreSQL

SPECIALIZED COURSEWORK

Operating Systems, Web Systems, Information Retrieval and Web Search, Database Systems, Natural Language Processing