Jack Hong

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WORK EXPERIENCE

Flexport   **Feb 2023 - Feb 2024**

Software Engineer - Java, GraphQL, gRPC, Ruby, Typescript, React, Next.js, Postgres, AWS

- Reduced the multi-step label printing process to one click by creating a full-stack flow from scratch, requiring new Java Spring Boot backend service and React user interface.
- Increased the success rate of email scrapers from 40% to 90% by redesigning email scraping. This was a user driven process - operators in the Amsterdam warehouse brought up flakiness issues with prior scrapers. I used datadog to monitor scrapers and introduced new scrapers to track invoicing emails. This work reduced cost leakages in invoicing and enhancing operational efficiency by reducing tedious email overhead.
- Collaborated with cross functional teams to support Flexport's integration with TipTop, a supply chain management tool. TipTop would send shipment events to Flexport, and another team would do some basic parsing of those events. I updated the Ruby backend to read these events and update warehouse relevant milestones. This improved operational efficiency by reducing the burden on operators.
- Collaborated with cross functional teams to support Flexport's integration with TipTop, a supply chain management tool.

Meta   **May 2022 - Aug 2022**

Software Engineering Intern - Python, Presto

- Introduced monitoring for Ads Machine Learning pipelines by using Python to collect status metrics.
- Improved time to resolution for oncall engineers by surfacing debug information to oncall engineers through Unidash (an internal dashboard tool). This information was sourced from the status metrics I collected.
- Used Python multi-threading to optimize metrics collection and updates.

Capital One   **Jun 2021 - Aug 2021**

Software Engineering Intern - Node.js

- Worked on an all intern team to create a ATM Locator feature in the Capital One banking app.
- I created the node.js backend to support the ATM locator service.
- Our intern team presented our project to the Retail Direct business unit to over 300 stakeholders.

Intel   **Nov 2020 - May 2021**

DevOps Engineering Intern - Python, C, C++

- Worked on Python testing infrastructure for FPGA and ASIC SSD controller using pytest. This allowed the CI/CD pipeline to run tests on real silicon - FPGAs and ASICs
- Wrote Python code to integrate Green Hills Software Debugger with the CI/CD pipelines to prevent regressions in SSD controller firmware.
- My work improved code quality across the Optane group - prior to my work code regressions were much harder to track and exceedingly common, due to the lack of device testing on deploys.

University of Michigan   **Sep 2019 - Dec 2022**

Lead Teaching Assistant - C, C++, Javascript

- Created the brand new EECS 370 website & website infrastructure using GitHub pages and actions, now maintained by current staff.
- Created a brand new Branch Predictor based project for students to code in C. This required a new project spec, starter files, and an autograder.
- Oversaw over 800 students each semester in EECS 370, Introduction to Computer Organization
- Led office hours where students learned about C, C++, ARM assembly, virtual memory, caching, and processor pipelines

EDUCATION

University of Michigan, Ann Arbor   **Jan 2022 - Dec 2022**

Master of Science & Engineering, Computer Science   **GPA: 4.00**

University of Michigan, Ann Arbor   **Sept 2018 - Dec 2021**

Bachelor of Science & Engineering, Computer Science   **GPA: 3.82**

Selected Courses: Natural Language Processing (Python), Advanced Compilers (C++, LLVM), Distributed Systems (Go), Parallel Computer Architecture (Verilog), Parallel Programming with GPUs (C++, CUDA) , Computer Architecture (Verilog), Computer Vision (Python), Operating Systems (C++), Embedded Systems (C++, ARM), Technology to Optimize Human Learning (Python)