

Skills

Languages: Python, C++, JavaScript/TypeScript

Frameworks: Django, d3, React, Redux

Technologies: Redis, Webpack, Babel, Docker, Jenkins, CMake, Unix, Git

Experience

Facebook | *Compiler Engineering Intern* Aug- Dec 2021

- Modified LLVM's binary tools to improve support for MachO object files
- Improved Swift's C/Obj-C interop user experience by introducing new diagnostics to the compiler

Amazon | *Software Engineering Intern* May - Aug 2021

- Designed, implemented and shipped a recommendations feature, helping **X M** customers improve their product listings

Electronic Arts | *C++ Engineering Intern* Sep - Dec 2020

- Developed a pipeline to automatically bootstrap test levels with online service infrastructure

A Thinking Ape | *Software Engineering Intern* Jan - Apr 2020

- Created a uWSGI worker profiling tool allowing engineers to easily collect flamegraphs and other performance metrics from production
- Implemented a thread safe **Redis** wrapper and **Django** middleware to log per request Redis latency metrics
- Identified and resolved performance bottlenecks, reducing latency of numerous REST APIs by over **50%**
- Configured a Python **daemon** and **TCP** server to allow engineers to programmatically execute shell commands on remote machines

Splunk | *Front End Software Engineering Intern* May - Aug 2019

- Created a **patent pending** JSON viewer capable of displaying and searching files **10x** larger than competitors
- Improved application responsiveness using virtualization, web workers, memoization and the JS event loop
- Produced a library of animated and interactive data visualization components with **SVG**, **d3.js**, and **React**

Projects

Java 1.3 Compiler

- A compiler for a subset of Java 1.3, written in C++, producing x86 assembly
- Wrote a [lexer generator](#), LALR1 grammar and code generation tools for various language features such as local variable mutation and method/constructor invocation

Education

University of Waterloo

Bachelors of Computer Science

mGPA 90%

Sept 2017 - Apr 2022