

Michael Aspinwall

Education

Aug 2018–**Carnegie Mellon University**,
Present *B.S. in Computer Science, Systems Concentration*, School of Computer Science, GPA - 3.29.

Relevant Coursework

Computer Science(Theory).

Great Theoretical Ideas in CS (Mathematics applied to Computer Science)

Software Foundations of Computer Security(Logic underlying Computer Security)

Computer Science(Programming).

Operating Systems(C)

Algorithm Design and Analysis(C)

Distributed Systems(Go)

Introduction to Computer Security(C, Python)

Introduction to Computer Systems (C)

Principles of Imperative Programming (C)

Parallel and Sequential Data Structures (SML)

Work Experience

May 2021–**SWE Intern**, GOOGLE, INC.

- August 2021 Work on the GKE Networking team, implementing cluster analytics for Kubernetes, specifically for Dataplane V2
- Backend work for the GKE networking team in Golang
- Gained experience with large codebase, and how to properly implement new features with a larger team
- Connecting with other teams working on the same project and coordinating approaches for building code in parallel
- Implementing feature as a sole developer, making design decisions along the way with feedback from team
- Helped to prevent large performance regression by reverting a problematic release, identified through analytics

May 2020–**STEP Intern**, GOOGLE, INC.

- August 2020 Worked with two other interns to implement a project management website for the ChromeOS Lab
- Full stack development utilizing Lit-Element, Java Servlets, and Google Datastore as the stack
- Built the front facing API(Java) to allow the frontend to interact with the backend through HTTP Methods
- Created a personal portfolio, using Bootstrap3, Java Servlets and Google Datastore
- Attended various talks throughout the summer, exploring the various fields of tech that Google is a part of
- Connected with teams outside my field of work such as BigQuery through a mentorship program

Projects

Capital One **QR Enabled ATM.**

- SES Winning hackathon project consisting of a group of 5 students from various schools
- Developed a Python and Java app so users could create transactions before going to the ATM
- Implemented the backend using firebase to store and update transactions in real time

Hack112 **LeapMotion Base Defense.**

- For a hackathon a team of 3 people and I built a game involving LeapMotion, a hand tracking device
- Rotating the players wrist would rotate a shield in game that defended the center base from incoming projectiles

Skills

Languages Go, Python, C, Java, Elixir, Ruby, SML

Frameworks AngularJS, Ruby on Rails, Phoenix

FrontEnd HTML/CSS, JavaScript, TypeScript

Databases PostgreSQL, SQLite3, Neo4j

Personal Details

Language English, Russian

Hobbies Mountain Biking, Hiking, Video Games