Samuel Wolfson

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Education

University of Washington, Seattle WA **2015-2020**

- Masters of Science, Computer Science (3.9 GPA) August 2020
  - Selected Coursework: Computer Security, Embedded Systems, Computer Architecture
- Bachelor of Science, Computer Science (Manga Cum Laude, 3.9 GPA) March 2019
  - Selected Coursework: Operating Systems, Compilers, Machine Learning

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Skills

Languages: C, Golang, HTML/CSS, Java, JavaScript, LaTeX, Python, Terraform (AWS), TypeScript, Ruby.
Frameworks: Django, ExpressJS, FastAPI, Flask, gRPC, Ruby on Rails, React, JavaParser.
Environments: Docker, Git, Kubernetes, SQL (MySQL, PostgreSQL), UNIX/Linux command line.
Platforms: AWS.
Other Areas of Experience: University teaching, course development.

Projects & Activities

Processing to P5.js Compiler **Summer 2018**

- Modified a Java parser and AST builder library to build an AST for the Processing programming language (processing.org) and output code in the the JavaScript version of the language, P5.js (p5js.org).
- This compiler was used by 40 students in an introductory programming class (Computer Science Principles) so they can run their Processing code on the web without manually converting it.

Work Experience

ExtraHop Networks: Software Engineer (Cloud) **2020-Present**

- Built and maintained microservices in Golang and Python, running atop EKS.
- Wrote Terraform to deploy and manage complex AWS services.
- Wrote frontend code in React using TypeScript.

UW CSE: Predoctoral Instructor **2019-2020**

Courses: Hardware/Software Interface, Computer Science Principles

- Prepared and delivered three lectures a week for a quarter-long course.
- Managed staff of three TAs and classes of up to 50 students.
- Led weekly meetings to discuss goals, manage grading load, and plan for the week.
- Developed new grading infrastructure for programming assignments using Docker images on the Gradescope platform.
- Wrote, and developed grading rubrics for, midterm and final exams.
- Made significant changes to the Computer Science Principles course and wrote an experience report about the changes.

UW CSE: Teaching Assistant **2017-2020**

Courses: Hardware/Software Interface, Computer Science Principles, Compilers, Computer Security

- Led sections, labs, and office hours.
- Helped to develop new course materials, worksheets and infrastructure; developed and presented lectures.

Arista Networks: Software Engineering Intern **June-September 2018**

- Implemented code to automatically power off servers in our test environment when they are not actively in use, leading to a 9% decrease in overall energy usage by test servers.
- Designed a strategy to move management code for test servers out of local user workspaces and into containerized microservices, using Docker to run the services and gRPC to facilitate communication between the clients and the services.
  - This design allows the underlying implementation of the service to change without breaking outdated workspaces.
  - Wrote an implementation of a service (in Golang) using my design that controls the power state of our test servers.