

Education

Washington State University

BS Computer Science (GPA: 3.2)

Aug. 2016 – Dec. 2020

Pullman, WA

Coursework: Data Structures, Algorithms, Systems Programming, Computer Architecture, Software Engineering Principles, Operating Systems, AI, Computer Security, Web Dev, Mobile Dev, Big Data, Computer Networking.

Experience

Capital One

Software Engineering Intern – Retail & Direct Tech

June 2020 – Aug. 2020

Washington D.C.

- Implemented SSO (single sign-on) and feature toggling functionality for new teller software that will replace legacy vendor software in all Capital One branches (450+) and will handle over 40 million transactions per year totalling over \$5 billion.
- Technologies: JavaScript, TypeScript, Angular, NodeJS, Express, TDD, Jest, AWS (Cloudformation, RDS), Git, REST API Development, OAUTH, HTML.

METER Group

Software Engineering Intern – Production Support Team

May 2019 – July 2020

Pullman, WA

- Drastically improved company oversight of their production floor by replacing a tedious pen-and-paper process with a robust full-stack website to track defective products.
- Revitalized a full-stack production floor dashboard website by implementing an improved UI and adding new features that allow the company to better use data to make vital business decisions.
- Technologies: Python, HTML, SQLAlchemy, Flask, jQuery, Bootstrap, NGINX, Vagrant, Git, CI/CD, TDD, SQLAlchemy.

Washington State University

Undergraduate Researcher – Dr. Haipeng Cai

Oct. 2018 – Jan. 2019

Pullman, WA

- Reduced time to retrieve Android APK files used for research from an online repository by 90% by writing a script to parse a CSV file with over 9 million entries in O(n) time.
- Used libraries Simidroid and Deguard to obtain detailed information about the similarity of the code between two Android applications which required an adeptness at using sparsely documented software.
- Technologies: Python, Git, Research.

Projects

Microsoft Sight Sign (2019 – 2020)

- Senior capstone project where I worked on a team of three students and a senior Microsoft engineer to develop new features and fortify Microsoft’s open source Sight Sign software which allows people suffering from ALS to sign documents by controlling a robotic arm via Windows eye tracking.
- Technologies: C#, G-code, UI Design, Azure Devops.

Linux-Compatible File System (2019)

- Developed a Linux-compatible EXT2 file system and a shell that supports over 20 common bash commands which allowed me to become more comfortable with low-level programming.
- Technologies: C, Linux, Git.

Skills

Languages Python, C, C#, JavaScript, TypeScript, HTML, CSS, Swift.

Libraries & Frameworks Flask, Express, Jest, Angular, React, jQuery, Bootstrap, PostgreSQL, MongoDB.

Other Linux, Git, TDD, CI/CD, AWS, Mobile Development, REST API Development, 120 WPM typist.