

Michael Larson

Issaquah, WA | (509) 715-7431 | michael.j.larson@wsu.edu

Personal Page: <http://mikelarson.pythonanywhere.com> | LinkedIn: <https://www.linkedin.com/in/larson2/>

Education

WASHINGTON STATE UNIVERSITY

DECEMBER 2022

- Bachelor of Science in Software Engineering
- Minor in Mathematics
- Related Coursework: Object-Oriented Principles, Design & Analysis of Algorithms, Programming Language and Design, Software Requirements and Maintenance, Computer Security, and others
- Member of the Software Engineering and Association for Computing Machinery clubs.

Experience

SOFTWARE ENGINEERING INTERN | METER GROUP INC.

APRIL 2021 – PRESENT

- Built an automated system testing suite using Robot Framework to reduce testing time by over 950%.
- Restructured front end design using JavaScript, CSS, and HTML to fix bugs that affected over 3,000 users.
- Redesigned webpages to use pagination leading to over 2000% speed up in load time for front end users.

APP DEVELOPMENT INTERN | YUMYUM MORALE

OCTOBER 2020 – MARCH 2021

- Implemented 4 quiz like games using JavaScript to help customers memorize their company's content.
- Created a diverse logging system using Django signals to capture all CRUD events for audit purposes.
- Wrote a Gitlab CI and a test suite in Django test which triggered on commits reducing lead time by 200%.

TEACHERS ASSISTANT | WASHINGTON STATE UNIVERSITY

AUGUST 2019 – MAY 2020

- Guided and facilitated students' success for both introductory computer science classes at WSU.
- Supervised 10 students a semester to over a 92% pass rate in Data Structures in C and C++.
- Duties included operating a weekly lab session, holding biweekly office hours, and grading student work.

Projects

VIRTUAL CLASSROOM ENVIRONMENT SIMULATOR (WSU HACKATHON 2021 – 2ND PLACE)

- Developed a multiplayer "game" that was designed to create a different experience to virtual school.
- Students interact in an RPG environment and talk with proximity chat/video, emulating real life.
- Designed a UDP and TCP networking system, added character movement using C# and Unity.

AI STOCK MARKET TRADER (PERSONAL PROJECT)

- Collaborated with a partner on a Q-Learning bot that actively trades on the foreign exchange market.
- Fashioned the machine learning application to use over 20 years of data to train the learning algorithm.
- Constructed the project using Python and the pandas library. It uses the Oanda API to get current data.

MUSIC VIDEO GENERATOR (WSU HACKATHON 2020)

- Worked in a group to design a program that generates a music video from an inputted audio file.
- Connected to the Google Cloud Text-to-Speech endpoint to find the words that were in the file.

MULTITHREADED HASH TABLE (CS 223 PROJECT)

- Partnered with a classmate to create a hashing and multithreading visualization software.
- Incorporated multithreading using OpenMP for C++ which lead to a 200% speed increase.

DJANGO WEBSITE (PERSONAL PROJECT)

- Authored a personal website to help showcase my project and to display source code to my projects.
- Composed my personal portfolio backend using Python and Django. Frontend is vanilla JS, CSS, and HTML.

Languages and Skills

- Python
- C / C++
- JavaScript
- HTML
- CSS
- Git
- Django