

# Brandon Altermatt

## Skills

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### Languages

C, C++, Python, C#, Java, x86 Assembly, PostgreSQL, Javascript, HTML, CSS

### Technologies/Frameworks

GCP, AWS, Git/Github, Agile/Scrum, Linux/Unix OS, Windows OS, Wireshark, Node.js, Bootstrap, React, Express, Cassandra

## Education

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### Portland State University

Portland, OR

*Bachelor of Science, Computer Science, Minor in Mathematics*

8/2021

*Cumulative GPA: 3.65*

*Relevant Coursework:* Web and Cloud Security, Cloud and Cluster Data Management, Malware Reverse Engineering, Internetworking Protocols, Operating Systems, Algorithms, Full Stack Web Dev, Relational Databases

## Projects & Experience

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### Vegify 04/2021-Present

- Implemented a web interface with React and a backend menu parser in Python as part of a remote 8-person team.
- Parses a menu uploaded to the front end website, generates vegan substitutions based on current menu items.
- Generates a link to a Shopify shopping cart with a list of recommended substitute products.

### Python IRC 1/2021-3/2021

- Implemented an IRC server and client in Python using sockets as part of a remote 3-person team.
- Clients could send text to one another through a central server. Clients could make rooms and private message.
- I designed the server that tracked clients and transferred messages, and set up CI.

### CRUD Microservice Application 7/2021-8/2021

- Implemented a backend and frontend for a CRUD application using a microservice architecture.
- Backend applications were written in Django and Flask, the frontend application was written in Angular and React.

### Java Apache FTP Client 6/2020-8/2020

- Built and tested a command-line FTP client in Java as part of a remote 4-person Agile team.
- Used Apache FTP library to build a client that connects to a server and manipulates local and remote files.
- Practiced Agile methods including scrum, sprints, kanban, pair programming, and continuous integration.

### Python Pentesting Scripts 03/2021-06/2021

- Wrote a collection of Python scripts designed to leverage vulnerabilities of Portswigger websites.
- Examples include SQL injection, XSS, or CSRF attacks leveraged to elevate privileges and exfiltrate data.

### C Xv6 Operating System Development 9/2019-12/2019

- Implemented new system calls and control sequences for the xv6 operating system in C.
- Adjusted the process scheduling algorithm from round robin to a multilevel feedback queue.
- Added control sequences to display current processes' information and budget.

## Leadership & Volunteering

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### We In Computer Science | Programming Mentor 9/2018-06/2021

- Met regularly with lower division CS students, provided advice on coursework and study strategies
- Provided additional guidance on project design, coding style, and algorithms

### Computer Action Team | Technical Support 9/2019-1/2021

- Provided desk support for engineering school IT services to engineering and software students
- Troubleshooted software issues, networking and connectivity issues, account and data recovery, etc.