Brandon A. Altermatt

Skills

Languages

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

Platforms & Frameworks

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

Paradigms & Methodologies

API Development, Database Management, UI Design, Automated Testing, Object Oriented Programming, Design Patterns

Experience

Software Engineer | TTM Technologies

11/2021-Present

- Worked with interdisciplinary team to implement automated solutions for circuit board manufacturing processes.
- Designed and deployed software projects ranging from industrial HMIs to full-stack web applications.
- Established project standards including version control, coding style, and project documentation.
- Tested prototypes with stakeholders and users to ensure functionality and UI meet project requirements.
- Participated in the full software development lifecycle, working within broadly defined parameters.
- Supported legacy systems and refactored projects to support new requirements.
- Coached automation mentor on implementation of material unloading and transportation projects.

Software Developer Intern | Vegify

04/2021-08/2021

- 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.

Projects

CLCA Documentation Web Application

- Designed and implemented a web application to create, search, and display CLCA documents as PDFs.
- The frontend is built with React and Bootstrap. The backend Node server hosts the frontend and runs an API.
- The API queries both SQL Server and Oracle databases. Routing is done using Ajax and Express.
- The application was hosted on a Windows Server. IIS was used to expose the website to the network using IISnode.

Copper Core Tracking Software

- C# MVC program to read and display sensor data that tracks copper panels across an industrial cleaning line.
- Interfaces with industrial loader to halt loading and control panel release timing.
- Detects jams and anomalous copper thicknesses, triggers alerts that pause production and notify operators.
- Sends data over a network for operators in the next process area to monitor the line status.

Industrial Laminator Web Dashboard

- Web application to graphically represent SQL data generated by an industrial laminator.
- Metrics such as utilization and temperature can be graphed within a time range.
- The frontend is built with React and Bootstrap; Chart.js is used to build graphs from the laminator data.

Python Pentesting Scripts

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

Education