Lucas Thiessen

Skills

Languages: C++/C, HTML/CSS, JavaScript, Python, PHP, SQL

Tools: Arduino, Atom, Firestore, Figma, Git/GitHub, Heroku, MongoDb Atlas, UNIX/Linux, Visual Studio

Libraries/Frameworks: Bootstrap, Express, Laravel, Next.js, Material UI, Node.js, Pygame, React, Requests

Experience

SOFTWARE ENGINEER | ALERTDRIVING | JANUARY 2023 - APRIL 2023

- Led a team tasked with researching and implementing password encryption methods, resulting in the improvement of secure password storage and retrieval throughout an **SQL** database
- Collaborated with product managers, quality assurance team, and other developers to implement a variety of new features and bug fixes using PHP, JavaScript (Ajax, jQuery), SQL, HTML, and CSS
- Authored unit tests for features throughout AlertDriving's system to improve bug detection

BACK-END SOFTWARE DEVELOPER | YEAR ZERO STUDIOS | MAY 2022 - AUGUST 2022

- Developed a quiz-building application from the ground up using **React**, **Next.js**, **Firestore**, and **Material UI**
- Designed and implemented various new features and bug fixes for multiple websites managed by Year Zero Studios using tools such as **Figma**, **Git**, **Firestore**, and **Heroku**
- Composed support documentation on topics including Git, Heroku deployment, and Firestore

COMPUTING ASSISTANT | UNIVERSITY OF WATERLOO | SEPTEMBER 2021 - DECEMBER 2021

- Developed a mobile version of the Faculty of Arts asset management website using PHP, HTML, and JavaScript
- Responsible for software maintenance across the Faculty of Arts applications and asset management website
- Provided desktop and hardware support for students and staff in the Faculty of Arts

SUPPORT ANALYST | REGIONAL MUNICIPALITY OF YORK | JANUARY 2021 - APRIL 2021

- Provided cellular and desktop support to the employees of the Regional Municipality of York
- Identified and resolved employee issues using service desk ticketing software, BlackBerry UEM and Microsoft Intune
- Composed support documentation on common issues to reduce the amount of time they take to solve

Projects

REAL-TIME OPERATING SYSTEM IN C | SEPTEMBER 2022

- Designed and implemented a memory management system for the kernel using a first-fit algorithm
- Developed a multi-task priority-based kernel to manage the running tasks, as well as schedule the next one to run using a min-heap and aging
- Implemented inter-task communication and interrupt handling, allowing tasks to communicate with each other and input/output devices

Education

UNIVERSITY OF WATERLOO | EXPECTED 2025

Bachelor of Applied Science in Computer Engineering