Darnell Foster

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EDUCATION

Bachelor of Computer Science: Cybersecurity Stream (Co-op)

Sep 2021 - Present
Carleton University, Ottawa, ON

GPA 3.7/4(A)

AREA OF STRENGTH

Languages: Java, Python, HTML/CSS, C/C++, JavaScript, SQL, Bash

Tools: Git, MS Office, Outlook, Godot, Putty, qt, Docker, Node.js, VirtualBox hypervisor,

SKILLS, EXPERIENCES AND ACCOMPLISHMENTS

- Implemented principles of OOP, in Intro to Computer Science II, to ensure the quality of code.
- Used VMs and Microsoft WSL for projects in a Linux environment gaining familiarity.
- Wrote algorithms and chose data structures, in Abstract Data Types and Algorithms, to create code optimizing runtime and space.

PROJECTS

Elevator System Simulator in Qt C++ (Mar. 2024)

- Developed an elevator system simulator using Qt C++, incorporating a graphical user interface.
- Employed object-oriented software engineering approach, leveraging use cases, sequence diagrams, and class diagrams to ensure clear and efficient system design.
- Implemented various design patterns such as the observer pattern.
- Implemented multithreading to manage concurrent elevator operations and user interaction.

Health and Fitness Club Management System (Nov. 2023)

- Developed a club management system, using PostgreSQL, Node.js, and Express.js.
- Used branching with GitHub's pull requests, issues, and wiki features to manage project
- Used database queries to handle user registrations, login, and access levels within the application.
- Ensured secure handling of user information and passwords using bcrypt for password hashing and validation and implemented .env files for secure database connectivity.
- Collaborated with the team to define and distribute project tasks evenly.

Cook-Book (Aug, 2023)

- Developed a web app using the React framework in order to create a user-friendly interface.
- Implemented search, filter, and page buttons for users to refine and navigate their search results.
- Used APIs for acquiring recipes to cut down on code using pre-established services.

Web Scraper (Oct. 2022)

- Used the JSoup library to parse and scrape HTML of job listings from LinkedIn
- Utilized Docker to containerize the app and ensure consistency in the development environment.

File Server Project (Jul. 2022)

- Implemented a TrueNas file server, by repairing old computers preventing waste of functional parts.
- Utilized old hard drives to create a mass storage pool through disk mirroring and striping
- Selected and configured RAID hard drive setup for desired server operation and performance.

CERTIFICATIONS

Google IT Automation With Python (Coursera, June 2023)

- Using Python to Interact with the Operating System Coursera, June 2023
- Crash Course on Python Coursera, May 2023
- Introduction to Git and GitHub Coursera, June 2023
- Troubleshooting and Debugging Techniques Coursera, June 2023
- Configuration Management and the Cloud Coursera, June 2023
- Automating Real-World Tasks with Python Coursera, June 2023