Amitoz Jatana

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EDUCATION

University of Toronto | Honours Bachelor of Science   September 2021 – April 2025

Computer Science Specialist (Co-op), Software Engineering Stream

WORK EXPERIENCE

Treasury Board Secretariat | Web Developer   September 2023 – December 2023

- Pioneered the design and development of interactive web pages on the Financial Management Gateway, employing **React**, **HTML**, **CSS**, and **JavaScript** to create an interactive user experience.
- Led backend migration from SharePoint to a **SQL** database, successfully implementing robust **CRUD** functions for each component using the SQL database **API** for a notable **35%** efficiency gain.
- Ensured the resilience and reliability of web pages through rigorous manual testing and the implementation of **Jest** unit testing, ensuring optimal performance and user satisfaction with an exceptional **98%** testing coverage.
- Effectively used **Git** version control within **Azure DevOps**, actively managing **50+** pull requests/branches to ensure seamless collaboration throughout the development lifecycle.

PROJECTS

PassionPals Web Application | 👥 6   **GitHub**

- Acted as Scrum Master, leading the **Agile** development of a dynamic **web application** that empowers **200k+** users to seamlessly create and enroll in a diverse range of events based on shared interests.
- Engineered a three-tiered architecture using the **MERN** stack and a **REST API** for client-server communication, achieving a notable **40%** enhancement in the application's scalability, security, and overall performance.
- Implemented a recommendation **algorithm** utilizing subscribed categories, user locations, and friend enrollments, resulting in an **85%** increase in user engagement and fostering a more personalized experience for each user.

Course Assist Application | 👥 4   **GitHub**

- Created an innovative **Android application** enabling **50k+** students to effectively plan their courses by leveraging key information, including prerequisites and offering sessions, managed by the Admin.
- Implemented efficient functionalities using **Java** and **Realtime Database** in **Firebase**, enabling seamless login for the Admin and course management operations such as addition, updating, and deletion.
- Conducted rigorous unit testing using industry-standard tools like **JUnit** and **Mockito,** resulting in an impressive reliability and stability rate of **95%** for the application, ensuring a smooth user experience for the vast user base.
- Actively collaborated with a **Scrum** team to successfully deliver six user stories, adhering to **Agile** principles, and effectively utilized **Jira** for efficient task management and progress tracking.

System Monitoring Tool | 👤 1   **GitHub**

- Engineered a robust **C program** with a remarkable **95%** accuracy rate to meticulously monitor and track system resources, providing invaluable insights for efficient resource management.
- Implemented cutting-edge functions to seamlessly retrieve and display critical system information, empowering users with comprehensive visibility into their system's performance.
- Unleashed creativity by crafting captivating graphical representations of memory usage and CPU utilization over time, further enhancing the program's visual appeal and user experience.

Hungry Ogre: MIPS Assembly Platform Game | 👤 1   **GitHub**

- Engineered a main loop to seamlessly handle game states, keyboard input, and sprite/object collision detection, resulting in a **50%** reduction in lag, delivering an immersive and highly responsive gaming experience for users.
- Pioneered the development of a captivating additional feature that introduced moving enemies, enhancing the game's complexity by **35%**, providing users with a more immersive and rewarding experience.

SKILLS

- **Languages:** Python, C, Java, HTML, JavaScript, CSS, Kotlin, Assembly, SQL, TypeScript, Unix/Shell scripting
- **Tools:** Android Studio, Firebase, MongoDB, Flask, Bootstrap, Tailwind, JUnit, GitHub, React, Docker, Node.js
- **Concepts:** Design Patterns, Agile Methodology (Scrum), OOP, Data Structures and Algorithms