Zainab Manal . Jarvis Consulting

I am a passionate learner and a highly motivated software engineering graduate from Ontario Tech University. Throughout my academic journey, I gained an expertise in agile methodology, project management, and a proficiency in programming languages such as Java, JavaScript, and Python. Alongside my academics, I completed several projects as well as an internship which allowed me to refine my collaborative problem-solving and effective communication.I am drawn to the ever-changing nature of the technology field and thrive off the challenges intrinsic to software development. As such, Ive worked on a diverse range of projects involving AI implementations, mobile app development, and distributed systems, and have used technologies like MongoDB, Firebase, and Windows Desktop application development. The opportunity to work on both the front-end and back-end greatly appeals to me as it fosters continuous development and learning. As a recent graduate, I bring a new perspective and a commitment to always getting better and I am eager to contribute my skills in an innovative environment.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git

Competent: JavaScript, MongoDB/Firebase, C/C#/C++, HTML/CSS, Python

Familiar: Vue.js, Android Studio, AWS, Jest, Flutter

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_ZainabManal

Cluster Monitor [GitHub]: Implemented a Linux Cluster Monitoring Agent tool on a remote CentOS machine using technologies such as Docker, GitHub, PostgreSQL, and Crontab. The tool was used to collect and monitor real-time hardware specifications and CPU memory usage from the host machine and store the data within a Postgres database. The project is designed for users with clusters of machines in their projects, providing real-time insights into resource usage. Testing was done manually and each script was tested to ensure that it adhered to specifications and collected the required data.

Core Java Apps [GitHub]: Developed a grep application that employs two methods for pattern searching within files in a directory. For moderate-sized datasets, file I/O and looping were utilized to reliably find patterns in files. Lambda and Stream APIs were used to analyze large datasets and manage files larger than the system's physical memory. Maven was employed to build and package the application, and Docker Hub was utilized to simplify deployment across various environments.

Highlighted Projects

In-Room Student Localization System: The In-Room Student Localization System is a student identification system created for university classrooms, utilising Bluetooth signals emitted from laptops. The scope of the project encompasses signal reception, identification, and the determination of student locations. The application received and identified unique Bluetooth signals and then determined the location of students associated with a specific signal.

MedSol - Medical Solutions (Cloud-Based Health Care Service System): MedSol - Medical Solutions is a cloud-based healthcare service system used to facilitate booking and hosting online appointments with healthcare practitioners. Developed during the height of the COVID-19 pandemic, it aimed to streamline doctor's appointments, ensuring that they were easily accessible while minimising human contact. The system integrated a WebRTC API for real-time audio and video communication. The frontend was built using JavaScript, HTML, and CSS, and the platform was hosted on the Google Cloud Platform.

Professional Experiences

Software Developer, Jarvis (2023-present): Developed code and conducted extensive testing and debugging. Employed agile methodologies and Git-flow to create Java applications running within Docker containers. Managed data projects using Linux, Bash, Docker, and Postgres, overseeing project tickets through Gitflow to ensure code quality and project specifications.

Student Software Developer, BESTECH (2021): Contributed to the development and testing of a web application designed to track a smart storage cube within a mine. Employed Flutter and Dart for mobile app development, alongside

Vue.js for the web application's frontend, ensuring an intuitive and seamless user experience. Leveraged the Jest framework to conduct thorough unit tests to ensure issue resolution. Identified, tracked, and assisted in the resolution of program defects by performing additional tests. Monitored bug resolution, tested fixes, and provided quality assurance insights to assist developers in addressing ongoing challenges.

Education

Ontario Tech University (2017-2022), Bachelor of Engineering (Honors), Engineering and Applied Science - Ontario Tech Entrance Scholarship - Dean's List (2021)

Miscellaneous

- I enjoy reading as a means of relaxation. I tend to lean more towards the fantasy genre, but I do also really enjoy contemporary and historical fiction.
- I developed a passion for cooking during the pandemic and over the past few years, I've made dozens of dishes from multiple cultures and cuisines.
- I've been writing and tinkering away at short stories since elementary school. I enjoy the creative process and love seeing where it will eventually lead me.