

Maneesh Withanagamage

☎ 416-841-8915 | ✉ wmaneesh@outlook.com | 🏠 www.wmaneesh.com | 📷 wmaneesh | 🌐 wmaneesh

Education

York University

HONOURS BACHELOR OF ENGINEERING, SPECIALIZED IN COMPUTER ENGINEERING

Toronto, Canada

Sep. 2016 - Apr. 2021

- **Notable Courses:** Software Design Patterns, Relational Databases, Operating Systems, VLSI, Computer Architecture

Skills

Languages: Java, TypeScript, HTML/CSS, SQL

Software Tools: Akka, D3.js, React.js, Express.js, Cassandra, Protobufs, PostgreSQL, Canvas

Hardware: Cadence Virtuoso, HSPICE, Innovus

Work Experience

Bioinformatics Solutions Inc.

Waterloo, Canada

SOFTWARE ENGINEER

Mar. 2022 - Present

- Designed and implemented backend systems for processing and analyzing mass spectrometer data for proteomics research projects.
- Implemented Akka toolkit for reactive programming in scalable, highly responsive backend systems for large-scale proteomics data sets.
- Developed RESTful APIs, that used Protobufs, to integrate the web application with back-end proteomics data processing pipelines.
- Developed interactive data visualizations using D3.js and other libraries to display results in a user-friendly manner.
- Collaborated with application scientists, R&D and other teams to understand their data needs and translate them into user-friendly features.
- Conducted code reviews and proteomic studies with other coworkers, improving code quality and knowledge sharing within the team.
- Reviewed current and relevant proteomic research to better develop and implement new features.

Loblaw Companies Limited

Brampton, Canada

IT SOLUTIONS DELIVERY

Apr. 2021 - Mar. 2022

- Contributed to the creation, modification, and validation of System Requirement and design documents for the Manhattan Active project.
- Developed, configured, and tested modules for System Integration Testing (SIT) and User Acceptance Testing (UAT), driving automation and efficiency improvements.
- Performed thorough System Integration Tests on all Manhattan Active software functionalities, ensuring robustness and reliability.
- Built and validated current state processors, identifying and implementing new features required for deployment.

4PAY

Toronto, Canada

DEVELOPER & TECHNICAL ANALYST (INTERNSHIP)

Apr. 2020 - Sep. 2020

- Designed, Developed and Implemented a proof of concept Block-chain using React and Express.js.
- Proposed AWS Quantum Ledger Database as a solution to increase security of the company ledgers.
- Implemented a working AWS ledger using Quantum Ledger Database (QLDB) to propose the viability of the project to clients.
- Automated the documentation of the company's main system that consisted of over 500 APIs, improving efficiency by over 50%.
- Developed a reporting tool with SQL queries to display different reports to clients.

Projects

Hospital Communication Web Application

ENGINEERING CAPSTONE PROJECT

- Led the development of a real time web service for physicians and nurses to communicate efficiently in a busy hospital environment.
- Designed and implemented a database schema that would capture the complex communication network in hospitals.
- Developed a RESTful API to enable seamless interaction between the front-end application and the database, enhancing user experience and data accessibility.
- Teamed up to develop wireframes and prototypes using Figma, enhancing communication and project goal alignment.
- Technologies used: React, Express.js, RESTful API, Sass, npm, MySQL, Figma, Postman

Note Reading Quiz - For Piano

PERSONAL PROJECT

- Designed and implemented the user interface using simple HTML and CSS, ensuring a responsive and visually appealing layout across different devices and screen sizes.
- Implemented dynamic functionality and interactivity using JavaScript, allowing users to select a range of notes to be quizzed on and providing real-time feedback on their responses with audio.
- Utilized HTML Canvas to create a grand staff within the application, providing users with a visual representation of the notes they are being quizzed on.
- Technologies used: HTML, CSS, JavaScript