Jai Rajesh Mehta

EDUCATION Hamilton, Ontario | jairajeshmehta@gmail.com | LinkedIn | GitHub | Website

McMaster University

Hamilton, Ontario

September 2020 - April 2025

TECHNICAL SKILLS

Languages: Java, Python, C#, SQL, JavaScript, C++, C, HTML/CSS, Dart, Haskell, Elm

Technologies/Frameworks: Linux, Git, Flutter, Android Studio, React, Gerrit, Docker, Kubernetes, Maven

Experience

Software Developer Co-op

Ericsson Canada May 2023 - Present

- Collaborated in an Agile environment, partnering with mentors to integrate an automated Maven upgrade bot (Renovate) across 2 repositories. Successfully implemented rate limiting to curb excessive PRs and resolved a long-standing PR limit problem.
- Resolved version mismatches and issues through in-depth analysis of Docker logs and Kubernetes pods, adeptly debugging errors. Facilitated efficient collaboration using Jira and Gerrit.
- Upgraded and tested 20+ third-party dependencies across 3 distinct microservices within a CI/CD pipeline.

Vice President Software Architecture

BASc Computer Science (Honours Co-op) GPA: 10.45/12

McMaster Start Coding Club

April 2022 - Present

- Collaborated with team to improve and develop web platform used to teach over 10,000 children how to code in elm. The platform has over 1.5 million compiles and is also used to teach a Software Design course at McMaster.
- Prototyped, designed and implemented real time user analytics for mentors and teachers to gauge the progress of the class. Well received by teachers from schools throughout Canada with great feedback.
- Implemented a grid view along with a view for the mentors using React. Collaborated with team in weekly meetings to envision ideas to improve and optimize the website.

Teaching Assistant

McMaster University

January 2023 - April 2023

- Directed labs and graded assignments for 50 students. Assisted students with debugging C++ code and understanding Object Oriented Programming concepts in ENGTECH 1PR3: Object Oriented Programming.
- Conducted labs for 60 students. Coached students on applying Software design principles in elm lab assignments and oversaw their elm final project in COMPSCI 1XD3: Intro to Software Design Using Web Programming.

Projects

Findr | Flutter, Dart, Git

January 2022

- * Collaborated with teammates to come up with and develop a prototype for an app to make job finding easier.
- * Worked on the front end and designed the app's profile page and login page using Dart during a 36 hour hackathon challenge.(DetaHacks 8)
- * Received a score of 89/100 and was placed to compete against other productivity hacks.

Discord Math Bot | Python, Git

December 2021

* Developed a Discord Bot that finds the derivative of an input equation. Built a Lexer and Tokenizer that processes input text to tokens. Assisted in Parser development and implemented discord API to run bot.

3D-Pong | C#, Unity Engine, Git

July 2021 - August 2021

- * Developed game based on the classic 2D game "Pong" in a 3-D environment using Unity Engine.
- * Implemented Collision physics, Velocity-Acceleration components and Torque to all in-game objects through scripting in C#. Also built the scoreboard and sound on collision.
- * Published the game on Itch.io where it got 300+ views and 100+ browser plays.

SoundBoard App | Java, Android Studio

June 2021 - July 2021

- * Developed a Valorant Agent voice-line soundboard and published it on the Android store (100+ Downloads).
- * Designed UI, implemented Google AdMob API for banner and video pop-up ads that generated ad revenue.

Angle Management | ELM

January 2021 - April 2021

- * Led a team in the development of an educational web application using ELM for a final project in a course.
- * Developed the quiz pages, the virtual protractor that could be dragged/dropped to measure angles on the screen and implemented state switching that resulted in a score of 12/12.

Hotel Front Desk System (12th Grade CBSE Project) | Python, SQL September 2019 - February 2020

- * Built framework for a python application, to be used by hotel staff for managing a hotel database. App is used to log guests into rooms, calculate expenses, log them out of the rooms and print a bill. Received 10/10
- * Implemented database schema in SQL and connected the database to the python app functions using SQL API.

Asteroids | JavaScript, HTML, CSS

June 2018 - July 2018

- * Led a team in designing a spaceship shooter web game as a part of a summer course at Boston University.
- * Visualized the asteroids and implemented velocity-acceleration components along with the shooting mechanism.