### **Farzaan Rahim**

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# **Summary of Qualifications**

A results-driven Software Engineering student with strong experience in full-stack development, cloud computing, and system design. Proficient in various programming languages and software development methodologies. Seeking to contribute to an innovative engineering team as a software engineer.

### **Technical Skills**

- Languages: JavaScript, Python, C, C++, Java, SQL, Assembly
- Frameworks & Tools: Docker, Azure, Unity, VHDL, MySQL, Arduino IDE, MATLAB
- Platforms: Visual Studio Code, NetBeans, Quartus, Google Collab, CodeWarrior
- Others: Git, Figma, Eclipse, Cloud Computing (Azure, Docker)

### **Education**

Toronto Metropolitan University

Bachelor of Engineering – Computer Engineering, Software Engineering specialization September 2020 – June 2025

- Relevant Courses: Software Systems, Database Systems, Computer Networks, Distributed & Cloud Computing

## **Professional Experience**

Tutor | Academy for Mathematics and English June 2022 – Present

- Designed and implemented customized learning plans for high school students, using datadriven strategies to improve performance in STEM subjects.
- Improved students' problem-solving and analytical skills, which contributed to a 15% increase in test scores.

# **Projects**

Heart Disease Prediction using Hybrid Machine Learning Algorithms (In Progress)

- Developed a decision support system for doctors to predict heart disease using hybrid machine learning algorithms.
- Utilized healthcare data to implement machine learning models and assess their performance for accuracy in predicting heart disease.

Blood Pressure Monitoring Device (In Progress)

- Worked in a team of 3 to create a blood pressure monitoring device using Photoplethysmogram (PPG) and Electrocardiogram (ECG) sensors.
- Implemented machine learning models within a mobile app to analyze sensor data and accurately estimate blood pressure.

- The app, developed for Android, provided real-time health monitoring with intuitive visualizations, improving health tracking for users.
- Integrated Bluetooth communication between the device and the mobile app for seamless data transfer and device control.

Personal Finance Tracker - Completed

- Tech Stack: Python (Flask/Django), SQLite
- Features: Record income and expenses, track savings goals, visualize financial data.
- Learning Opportunity: Full-stack development, database management, data visualization (using libraries like Matplotlib).

Hospital Data Management System - Completed

- Developed a MySQL-based hospital management system deployed on Oracle APEX. Optimized data retrieval speeds by 30% through SQL query improvements.

Air Traffic Control System - Completed

- Built a cloud-based air traffic control system using Azure and Docker to manage real-time aircraft movements. Improved flight scheduling by 20% and reduced runway downtime.

Flight Booking Application - Completed

- Created a flight booking system using JavaFX, implementing the entire SDLC from UML design to state management, enhancing the UI/UX for booking processes.

Bank Account Secure Transactions - Completed

- Developed security protocols for banking systems using Python. Managed key encryption and MAC keys, ensuring secure transactions between bank servers and ATM clients.

### **Volunteer Experience**

Vice President of Brothers | TMU Muslim Students Association August 2021 – June 2023

- Led a team of 7 directors in organizing events and initiatives, fostering community engagement and outreach. Utilized Trello and Slack for team collaboration.

Operations Assistant and Youth Instructor | Ajax Boxing Club June 2018 – March 2020

- Managed gym operations and led boxing classes for children, focusing on skill development and discipline.

### **Certifications**

PCAP – Python Certified Associate in Programming (In Progress) Python Institute