# **IMRAN YAFITH**

Dedicated third-year Computer Science student with a strong foundation in data structures and algorithms and a keen interest in problem-solving and optimizing code efficiency. Experience building, testing and deploying user-focused applications using modern technologies.

## **EDUCATION**

## **Honours Bachelor of Computer Science**

Sep. 2021 — Apr. 2026

Sheridan College | GPA: 3.82

**Relevant Coursework** Data Structures & Algorithms, C/C++ Program Design, Enterprise Software

Systems, Distributed & Parallel Computing, Cloud Infrastructure

**Extra-curricular** *Hackville '23 Winner, Hackville '24 Participant,* Executive of the Sheridan

Computer Science Club, Python Tutor

## Professional Experience

## Naryant (Formerly Inovex) — Research Assistant

Oct. 2023 — Present

- Utilized *Simulation of Urban Mobility (SUMO)* and *OpenStreetMap (OSM)* to model and analyze traffic patterns, enhancing data accuracy for urban development projects.
- Synthesized a comprehensive dataset predicting traffic demand for the city of *Oakville*, utilizing simulation tools (SUMO, OSM) and machine learning techniques to forecast peak traffic patterns accurately.
- Collaborated with cross-functional teams to integrate simulation data with geospatial mapping applications, supporting strategic planning and decision-making.
- Conducted in-depth analysis of traffic flow data to develop sustainable urban traffic solutions.
- Delivered insightful reports to stakeholders, shaping urban traffic policies.

## Karmy Pain Clinic — Research Assistant

Dec. 2022 — Aug. 2023

- Engineered an AI-driven pain diagnostic system leveraging *Python* and *MATLAB*, improving patient diagnosis accuracy and treatment efficacy.
- Increased data processing efficiency by **30%** with improved analytics and machine learning.
- Played a pivotal role in a multidisciplinary team, contributing to the iterative development and optimization of the AI model based on patient feedback.

## SKILLS

**Programming Languages** Python, JavaScript, TypeScript, C#, C++, C, LATEX

**Frameworks & Tools** React, Next[S, Node.js, Express, ASP.NET Core, NumPy, Pandas

**Datastores** MongoDB, Firebase (Firestore), SQL Server, SQLite

**DevOps** AWS (EC2), Git, GitHub, Docker