

SHADMAN SOHEL

shadman.sohel04@gmail.com linkedin.com/in/shadman-sohel github.com/shadmansohel04 shadmansohel.onrender.com

Education

Toronto Metropolitan University (TMU)

Expected Graduation: May 2026

Bachelor of Computer Engineering | GPA: 3.81/4.33

Work Experience

Ontario Power Generation (OPG)

April 2025 - Current

Computer Engineering Intern

Toronto, Ontario

- Spearheading the development of an **AI-powered** form input assistant for governance documents as an **AI Ambassador**, leveraging internal **large language model** (ChatOPG) to streamline and automate data entry.
- Engineering an internal desktop application in **Python** to automate reactor safety reviews, supporting PDF uploads and **MySQL** database integration, **reducing review time by 40%**.
- Conducting Probabilistic Safety Assessments (PSA) by **modelling 15+** fault trees and performing detailed probability calculations to quantify reactor core damage frequency.

RaiseIt

September 2024 - January 2025

Software Engineering Intern

Toronto, Ontario

- Delivered **5+ backend API routes** with **Express** and **Node.js** for a **MongoDB** database management system, enabling fast full-text search and retrieval of **400+** bills, MPPs, and motions from the Legislative Assembly of Ontario.
- Built an internal web app with **Next.js** and **Tailwind CSS** for MPPs, enabling **40+** active users to view statistics and bill information with interactive chart and map components.

Toronto Metropolitan University

September 2024 - December 2024

Project Manager

Toronto, Ontario

- Managed and coordinated over **60** engineering students on term projects focused on **reverse engineering** and analyzing historical engineering disasters, guiding teams in research, collaboration, and presenting findings to faculty.

Projects

Morsum - Social Media App | [Download Link](#)

React Native | Spring Boot | PostgreSQL | PyTorch | AWS

- Drove **100%** of ideation and end to end technical implementation of a food based social media platform using **Spring Boot** and **React Native**, currently with **100+** active testers.
- Built a **REST API** with user workflows, image uploads to **AWS S3** optimized with **AWS CloudFront**, cutting load time by **70%**, chats via **WebSockets**, and daily streak tracking using **Quartz Scheduler**, all backed by **PostgreSQL**.
- Trained an image classification model using **PyTorch** and the **Food101** dataset for auto generated food predictions, deployed on a **Flask** server within **AWS ECS + EC2**, reducing recipe upload time by **25%**.

Battle Bites - Multiplayer Fighter | [Website](#) | [Devpost](#) | [Source Code](#)

React | Node.js | MongoDB | Google Gemini

- Developed an online Street Fighter style browser game in **36 hours** using **React** and **Node.js** where real life healthy eating triggers in game powerups and submitted to **Hack the 6ix 2025** for Best Game Hack.
- Engineered gameplay with **Socket.io** and **Express**, achieving sub **2ms** latency. Integrated **MongoDB** for powerup storage, **Auth0** for authentication, and **Google Gemini** to generate personalized powerups based eating habits.

AskFYEO - Q & A Chatbot | [Website](#)

Hugging Face Transformers | TensorFlow

- Collaborated with TMU's First-Year Engineering Office to build a Q&A chatbot that retrieves answers from a frequently asked **SQLite** database using **Hugging Face's all-MiniLM-L6-v2 transformer model** for semantic similarity.

LeetBot - 1st Place Winner (Ignition Hacks) | [Website](#) | [Devpost](#) | [Source Code](#)

Next.js | Flask | Mistral AI | GraphQL

- Built a turn based browser game where player arsenals are powered by **LeetCode** statistics and daily questions graded by **Mistral AI**, developed with **Next.js** and **Flask** in **32 hours**, winning **1st Place** at Ignition Hacks 2024.
- Implemented a responsive **WebSocket** enabled frontend with **NES.CSS** styling and custom **sprite** creation.

Technical Skills

Languages: Java, Python, JavaScript, SQL, HTML5, CSS, C/C++

Developer Tools: AWS, Postman, Git, Docker, PowerBI,

Frameworks: Spring Boot, ReactJS, NextJS, NodeJS, PostgreSQL, VueJS, Flask