Tamim Rahman

Toronto, Ontario | 437-775-0059 | https://tamimrahman.dev/ | t10rahman@ryerson.ca

Education

Computer Engineering (B. Eng) - Specialization in Software Engineering

Sep 2019 - May 2023

Ryerson University GPA: 3.8 / 4.0

Technical Skills

Proficient: Python, Java, C, Django, JavaScript, Sails.js, Rust, and SQLite. **Competent:** HTML/CSS, C++, Git, object oriented programming, SQL, and Linux.

Experience

Software Engineering Intern Toronto, ON

Sep 2020 - Present

Cybersecurity Research Lab (CRL)

- Developed a prototype web application using Sails.js to show international investors (of the University Blockchain Research Initiative) the potential of the CRL blockchain network in preventing fraud in the real estate industry.

Research Assistant - Cryptography Toronto, ON

May 2020 - Aug 2020

Ryerson University - Department of Computer Science

- Created an implementation of SIKE (post-quantum cryptography) for AVR microcontrollers using Rust and the relevant concepts of abstract algebra to decrease the time needed for cryptographic key-exchanges.
- Developed a Rust bignum library which allowed developers to store, perform basic arithmetic and modular reduction with 400+ bit numbers on 8-bit architecture with significantly lower overhead.
- Researched technical research journals/documentation to adopt and modify the established optimizations of SIKE.

Volunteer Experience

Lead Developer (Executive) Toronto, ON

Sep 2020 - Present

Ryerson Electrical/Computer Engineering Student Society

- Developed a custom discord bot using discord.py (python API) using to authenticate and automate user roles/permissions within the ECE student union's official server for online events/enrichment.

Controls Developer Toronto, ON

Sep 2019 - Aug 2020

Ryerson Rams Robotics (R3)

- Developed a python heat map to visualize radiation data for the Mars rover, resulting in a significant decrease in decision making time for operators in the Canadian International Rover Competition.
- Created a python app to simulate incoming radiation data for the Mars rover competition leading to more robust testing and an expected decrease in AI development and training time.

Featured Projects

Computer Vision aided Contactless Delivery, https://github.com/t32rahman/CVDelivery

2020

A python application that implements features of OpenCV and the Google Vision API to detect when a delivery has been made to a household and notifies the user via email, allowing for truly contactless and efficient deliveries.

Android - Pokédex, https://github.com/t32rahman/pokedex

2020

Applied aspects of OOP in Java to create an android app that allows users to search up the type, id, description etc. of the corresponding pokémon. The app has support for all generations and variations of pokémon.

More projects: https://github.com/t32rahman

Certifications

Cisco Certified Network Associate (CCNA)

Aug 2019 - Feb 2023

Certifies the ability to build and deploy networks that are reliable, secure, and scalable.

Earned by displaying in-depth knowledge of networking protocols and best practises.