# CHARRAN THANGESWARAN

charran.thangeswaran@torontomu.ca | LinkedIn | Website | GitHub | (647)-515-0412

#### **EDUCATION**

### **Toronto Metropolitan University**

Sept. 2021 - Apr. 2025

Bachelor of Engineering in Computer Engineering: Specialization in Software Engineering

### **TECHNICAL SKILLS**

**Programming Languages:** C, C++, Python, VHDL, Assembly, Java, HTML, CSS, SQL, MATLAB

Software & Tools: Windows, Microsoft Suite, Linux, Unix, Visual Studio Code, Git, GitHub, Arduino, Trello

#### RELEVANT EXPERIENCE

### CombatCraft

Electrical Team Member

Feb. 2024 - Present

Researching and implementing an ideal *microcontroller* for the battlebot that can be optimized for *C programming* and compatible with *Arduino IDE*

<u>Software Team Member</u>

Feb. 2024 - Present

Researching and experimenting with RF, Bluetooth, and Wi-Fi Arduino libraries

## **PROJECTS**

**Goblin Hunt** 

Feb. 2024 - Present

- Developing a simple text-based RPG game using C++
- Implementing control structures to manage player interaction and control the flow of the game
- Implementing specific battle *functions* for how much damage each type of goblin deals to the player

**Hip-Hop Shop** Jan. 2024 - Feb. 2024

- Developed a functional hip-hop music store application using *Java* and *JavaFX*, while implementing the *Waterfall methodology*
- Applied *object-oriented programming* concepts for album and user information to be stored, reused, and modified

Personal Website Dec. 2023 - Feb. 2024

- Designed and developed a personal portfolio web application using HTML and CSS
- Collected user feedback and improved website based on suggestions, demonstrating a commitment to user-centered design

## **Robot Guidance Challenge**

Nov. 2023

- Led a team of 3 students to develop a navigation system using for the eebot mobile robot to travel through a maze, achieving 95% completion in under 5 minutes
- Programmed an HCS12 microcontroller using Assembly to enable eebot movements and sensors
- Demonstrated strong *problem-solving* skills and *attention to detail* in resolving technical issues after trial runs

## **CERTIFICATIONS**

• Electronic Arts Software Engineering Job Simulation: Forage Nov. 2023

• **Tech Stewardship Practice Program**: Tech Stewardship Jan. 2023

• **Software Fundamentals Series**: IEEE Computer Society Toronto Metropolitan Chapter Nov. 2021