

Mukesh Sabesan

6476877258 | mukesh.sabesan@gmail.com

[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

Education

Toronto Metropolitan University | September 2021 - Present

Bachelor of Engineering, Software Engineering

Coursework: Object Oriented Analysis and Design, Data Structures and Algorithms, Digital Systems, Software Systems, Discrete Mathematics I

Work Experience

TutorBright | August 2022 – July 2023

Student Mentor and Tutor

- Helped students with understanding the Ontario curriculum, particularly in Mathematics.
- Mentored students and gave helpful advice with any educational and non-educational struggles they had.

Faculty of Engineering & Architectural Science at TMU | September 2023 – Present

Project Manager

- Coordinate and manage teams of Engineering students responsible for designing and engineering projects.
- Guide teams through their proposal, draft and final stages of their project.

Toronto Metropolitan University Recreation & Athletics | September 2023 – Present

Recreation Facilities & Fitness Centre Assistant

- Responsible for providing excellent customer service to members of the fitness centre at both fitness facilities at TMU
- Employ a variety of responsibilities which range from maintaining the facilities to providing customers accessories and equipment suited to their needs.

Skills and Abilities

Programming Languages: Python, HTML5, CSS3, JavaScript, Java, C, C#, VHDL, SQL

Libraries and Software: React.js, Node.js, Microsoft Office (Excel, Word, Outlook, Powerpoint), Jupyter, Git, GitHub, GitBash, Linux, AutoCAD, MATLAB, Arduino, Quartus Prime, Pygame, JavaFX, Swing, Oracle, Fusion

Projects

Pong Game – Java, Swing, Java AWT

- Developed a classic multiplayer Pong game using Java Swing and AWT libraries to create a visually appealing and interactive user interface.
- Utilized Swing components for designing the game window, score display, and user controls, ensuring a user-friendly experience.
- Implemented the core game mechanics, including ball movement, collision detection, and scoring logic, to replicate the classic Pong gameplay.

Aim Trainer – Python, Pygame

- Developed an interactive Aim Trainer using Python and Pygame, offering a dynamic shooting range environment inspired by AimLab's training environments.
- Implemented 3 difficulty modes that change based on time elapsed or the number of targets hit, with each mode decreasing the size of the targets.

Book Store Application – Java, JavaFX

- Developed a Java-based book store application using JavaFX for the owner to efficiently manage the store's inventory. This system allows the owner to add new books to the catalogue, set pricing, and keep track of stock levels.
- Designed the application to cater to customers' needs, allowing them to search for books by title, author, or genre, making it easy to find their desired books.
- Introduced a rewards points system, offering customers incentives for frequent purchases. Customers can accumulate points, leading to gold and silver classifications, which come with special discounts or privileges.

Budget Tracker App – React, Node, ContextAPI

- Created a budget tracker application using React.js and Context API to provide users with an intuitive and responsive interface for managing their finances. Users can easily add and categorize expenses, ensuring efficient expense entry.
- Utilized Node.js for the backend of the budget tracker application to handle data storage, retrieval, and user authentication.