

Mohammad Mahfooz

(416)-993-8800 | mahfoozm@my.yorku.ca | [linkedin.com/in/mohammadmahfooz](https://www.linkedin.com/in/mohammadmahfooz) | github.com/mahfoozm | mohammadmahfooz.engineer

EDUCATION

York University, Lassonde School of Engineering

Expected Jun. 2025

Spec. Hons. Bachelor of Engineering, Software Engineering

Toronto, ON

Relevant Courses: Data Structures, Object-Oriented Programming, Computer Organization

Overall GPA: 3.8/4.0

EXPERIENCE

Software Engineer Intern

Oct. 2022 - Jan. 2023

YURide

Toronto, ON

- Implemented the app front-end using **Interface Builder** and **SwiftUI**, creating an intuitive user interface. Utilized advanced features such as custom gestures and animations to enhance the overall user experience.
- Developed the app back-end using **Swift**, implementing custom data models and network services and using **Core Data** for persistent storage..
- Built the back-end using **JavaScript**, **Node.js**, and **MongoDB**, creating custom **RESTful** APIs for communication with the front-end. Used **Node.js** for a scalable server-side infrastructure and employed **MongoDB** to efficiently store and retrieve large volumes of data..
- Utilized **Git** and **GitHub** to manage version control and collaborate with team members on code changes.

PROJECTS

Portfolio Site | *TypeScript, React, Next.js, CSS, Node.js*

December 2022

- Developed a portfolio website using **TypeScript** and **Node.js** to showcase skills and projects.
- Utilized the **React** library and the **Next.js** framework to build the website.
- Implemented Styled Components (**CSS**) to style the website.

YorkU RMP Extension | *JavaScript, HTML, GraphQL, Node.js*

December 2022

- Developed a browser extension using **JavaScript** and **Node.js** to grab a professors info (difficulty, rating, etc.) from RateMyProfessors and display it on the YorkU course portal.
- Utilized **HTML** knowledge to scrape a course page and insert RateMyProfessors information next to the corresponding professors name.
- Implemented the **GraphQL-Request** library to pull professor data from the RateMyProfessors **GraphQL** API.

Air Quality Monitor | *Java, C++, Firmata, JavaFX, jSerialComm*

April 2022

- Developed an air quality monitor that displays current CO2 levels and temperature data using **Java** and **Firmata** to communicate with an Arduino board.
- Utilized **JavaFX** to display a GUI that shows real time CO2 data on a chart and graph.
- Implemented serial communication between **Java** and the Arduino board by utilizing **jSerialComm**, allowing users to operate a ventilation system in the GUI.

VOLUNTEER EXPERIENCE

Team Lead

Sep. 2019 – Jun. 2021

FIRST Robotics #6977

Toronto, ON

- Promoted to team lead of the FIRST robotics team after success on VEX robotics team.
- Oversaw development of the robot for the **Infinite Recharge** competition, using **C++**.
- Increased team size by 15+ members by spreading awareness of the team around the school.

Team Member

Sep. 2017 – Jun. 2019

VEX Robotics #6977

Toronto, ON

- Assisted development team in the 2018-19 season using **C**.
- Lead the build team for robot #2 for the 2018-19 season.
- Lead team to provincial semi-finals by developing a new strategy to help compensate for a low budget.

TECHNICAL SKILLS

Languages: Java, Swift, JavaScript, TypeScript, Python, C, C++, SQL, R, HTML, CSS, MATLAB

Tools and Frameworks: Node.js, Next.js, MySQL, MongoDB, GraphQL, React, Docker, Selenium, JUnit, Git