Ahmed Sabrah

(647)-997-2180 | sabraha@mcmaster.ca | linkedin.com/in/ahmed-sabrah | github.com/sabrahahmed

EDUCATION

McMaster University (B.Eng)

Sep 2020 - Apr 2025 (Expected)

Bachelor of Computer Engineering

Hamilton, ON

- McMaster Honor Award (\$750) | Dean's Honor List Recipient (May 2021) | McMaster Varsity Squash Team Starter
- **Relevant Courses**: Data Structures and Algorithms (C++), Software Development (Python), Principles of Programming (C, C++), Microprocessor Systems (C), Integrated Design Projects I (Python)

SKILLS

Programming Languages: Python • C/C++ • Dart • C# • JavaScript • SQL

Web Development: HTML5 • CSS3 • Angular • ASP.NET • Flask Data Science: MySQL • Matplotlib • Pandas • NumPy • MATLAB Tools: Git • Selenium • Azure DevOps • Docker • Linux Command Line

EXPERIENCE

Finastra

Software Engineer Intern

Jan 2023 - Present

Mississauga, ON

• Developing and enhancing web applications for Finastra's **Azure** hosted marketplace using technologies like **C#**, **ASP.NET**, **JavaScript**, and **Angular**.

- Building production-ready code, incorporating industry-standard practices such as **SOLID** principles and design patterns.
- Defining, automating, and executing unit tests (MSTest), ensuring functionality of the features being developed.
- Utilizing the **Azure DevOps** pipeline to manage CI/CD processes and verify the status of development branches.
- Participating in the full software development life cycle by communicating with SCRUM team on a daily basis.

Software Engineer Intern

May 2022 - Aug 2022

Mississauga, ON

• Conserved client, Canada's leading furniture store, an estimated 15 hours of weekly workload by developing over 100 object-oriented automated scripts for their **Oracle Cloud** ERP system using **Selenium** with **Python**.

- Managed over 500 HTML element paths and Oracle ERP login information by storing them into a MySQL database.
- Improved functionality of front-end web applications for clients using **Flutter** (**Dart**) that retrieve data from REST APIs built with **Python** and **Flask**.
- Boosted deployment efficiency for client applications by 25% by utilizing **Docker** containers on **Linux** CentOS 7 server.

PROJECTS

TriSpects

Pacemaker DCM 🖸 | McMaster University

Sep 2022 – Nov 2022

- Built a Device-Controller Monitor (DCM) using **Python** that provides a means of remotely transmitting instructions and receiving information from a pacemaker (developed by team in **MATLAB Simulink**).
- $\bullet \ \ Developed \ a \ graphical \ user-interface \ that \ allows \ up \ to \ 10 \ users \ to \ login, \ register, \ and \ communicate \ with \ their \ pacemaker.$
- Captured live heart electrogram data via PySerial and generated a live plot using Python's Matplotlib library.

Weather Application ☑ | Self-Taught

May 2022 – Jun 2022

- Designed a user-friendly **Flutter** (**Dart**) mobile application that displays live weather data in current device location as well as over 200,000 cities worldwide searchable by the user.
- Fetched weather information from public **REST API** and parsed the most important data to be used including the temperature, humidity, wind-speed, etc.

Spatial Mapping System | McMaster University

Mar 2022 – Apr 2022

- Built an **embedded** spatial measurement system using a time-of-flight sensor to acquire information in the surrounding area as an inexpensive and smaller alternative to commercial Light Detection and Ranging (LIDAR).
- Developed a program in **C** and **Python** while using a time-of-flight sensor and stepper motor to collect spatial measurements up to 3 meters and reconstructed a visual model using Python's **Open3D** library.
- Controlled the time-of-flight sensor connected to the stepper motor using the MSP432E401Y **microcontroller**.

LEADERSHIP

Squash Coach 🖸

Ontario Racquet Club

• Coached and mentored over 20 children during weekly squash clinics with an emphasis on enjoyment and discipline.

Fundraising Head

Homeless Outreach Providing Essentials

• Delegated a fundraising team and executed fundraising events to fund homeless care packages pertaining to human needs.