Aaron Rajan

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EDUCATION

McMaster University

Sept 2020 - April 2025

B.Eng.Mgmt, Computer Engineering & Management (Co-op) • GPA: 3.99/4.00

McMaster Honour Award (Dec 2020) | Dean's Honour List (Fall 2020 - Winter 2021)

SKILLS

Languages: Python • Java • C • HTML • CSS • JavaScript • MATLAB

Tools: Git/GitHub • Visual Studio Code • AutoCAD • Microsoft Office

PROJECTS

Remote Sensing for Sterilization Process | Modelling Team Manager

Oct 2020 — Nov 2020

- Collaborated to design container parts which consisted of a lid and base with detachable properties using AutoCAD.
- Developed a code model to replicate the hand motion of a surgeon using Python and muscle sensors to sterilize surgical tools by placing the containers into an autoclave in the Q-labs environment.
- Learned how to apply knowledge gained in this project to design systems to resolve real-world problems.

System for Sorting and Recycling Containers | Python Developer

Jan 2021 — March 2021

- In a team of 4, designed a system of **dynamic simulation parts** and **Python code** to properly recycle containers.
- Mechanism can classify containers using data from virtual environment (Q-labs), analyze container for contamination, and transfer container to correct bin for recycling.
- Expanded skills and knowledge of smart devices and assembly modelling.

Management System | Java Developer

May 2021

- Designed an employee management system which tracks the names, IDs, and wages of its employees and optimizes the process of managing employee data using **Java File I/O**.
- Implemented features, allowing for the addition to, removal from, alteration, search, and deletion of employee files.
- Learned the essentials of undertaking a solo coding project, which include **time management**, strong **work ethic**, and the **adaptability** to learn during a project.

Currency Converter | Java Developer

June 2021

- Developed a converter between all currencies in Java using JSON files and an API conversion system.
- Devised a simple, interactive graphical user interface (UI/UX) to enhance user experience using Java Swing.

WORK EXPERIENCE

Lifeguard | PPL Lifeguard

July 2021 - Sept 2021

- Supervised and interacted with 100+ residents weekly while securing their safety.
- Handled responsibility by maintaining and performing regular checkups on pool chemical levels.

LEADERSHIP & INVOLVEMENT

YMCA Volunteer | Gym Organizer, Front Desk

Dec 2017 - Jan 2019

- Set up games and activities for **50+** children aged 7-15 at a time.
- Led youth instructional sports, teaching fundamentals and monitoring their improvement while enjoying the sport.
- Assisted 750+ YMCA members as they entered the facility at the front desk.

Kumon Volunteer | Teacher, Instructor

June 2016 - Jan 2017

- Evaluated and helped with 1000+ math/English homework booklets of content from grades 1 to 12.
- Provided feedback and guidance to 500+ children who struggled with math concepts.