

# Sharjil Mohsin

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## Education

### McMaster University

B.ENG.MGMT IN SOFTWARE ENGINEERING AND MANAGEMENT, GPA: 3.4/4.0

Hamilton, ON

Sept. 2017 - PRESENT

- **Expected Graduation Date:** April 2023
- **Relevant Courses:** Data Structures and Algorithms, Software Design and Development, Software Testing, Databases

## Work Experience

### IBM

SOFTWARE ENGINEER INTERN

Markham, ON

Jan. 2022 - PRESENT

- Working on **backend development** with IBM Cloud using **Python** and **Java** as part of the Cognos Analytics team.

### Royal Bank of Canada (RBC)

Toronto, ON

SOFTWARE DEVELOPER INTERN

Sept. 2021 - Dec. 2021

- Designing applications in the mobile or online development technology space using **Java** as part of the **Android Development** team.
- Performing **unit testing**, as well as developing and leveraging **automated** unit testing frameworks.
- **Developing, troubleshooting, enhancing, and documenting** components developed by myself and others as per the requirements and detailed design.

### McMaster University - Faculty of Engineering

Hamilton, ON

TEACHING ASSISTANT

Sept. 2020 - Apr. 2021

- Ensured **50+** 1st year engineering students understood and implemented concepts on programming, engineering design, engineering professionalism, and material science through related hands-on engineering projects using **Raspberry Pi, Python, and AutoCAD**.
- **Facilitated** group discussion, **motivated** students to attain personal growth, and **encouraged** skills development.

## Extracurricular

### McMaster Software Engineering Society

Hamilton, ON

VICE PRESIDENT OF PROFESSIONAL DEVELOPMENT

Jun. 2021 - PRESENT

- **Creating** and **organizing** conferences, workshops, and networking events for software engineering and computer science students.
- **Coordinating** an annual career fair that connects software engineering, mechatronics engineering, computer science, and Bachelor of Technology students with top employers from the Hamilton region.

### McMaster Artificial Intelligence Society

Hamilton, ON

GENERAL MEMBER

Sept. 2018 - Apr. 2021

- Learned skills required to build an AI project, as well as discussed the impact and the ethical applications of artificial intelligence.
- Implemented machine learning algorithms using **Python** and using tools like **NumPy, Matplotlib, scikit-learn, and TensorFlow**.

## Projects

### Image Repository

- Developed a full-stack web application that allows users to upload, archive, download, and delete images from a secure **AWS S3 bucket**.
- Designed the front-end of the site using **HTML, CSS, and Bootstrap** and the back-end of the site using **Python and Django**.
- Implemented a feature that allows users to include tags to aid with image search as well as provided 'suggested tags' feature that uses object detection using machine learning through **Google Cloud's Vision API** and **TensorFlow**.
- Deployed using **Heroku** and utilized **PostgreSQL** for data storage and scalability.

### COVID-19 Pandemic Tracker App

- Developed a mobile application that retrieves worldwide COVID-19 data and visualizes the number of cases per country and overall.
- Created using **REST API** and **Volley Library**; built in **Java** using **Android Studio**.

### Pac-Man Desktop Edition

- Designed an interactive **JavaScript** app using an **object-oriented** approach in an **agile environment** to create a desktop implementation of the original Pac-Man arcade game.
- Performed **automated testing** using **Mocha** to ensure high software quality and stability.
- Maintained version control of program using **Git**.
- Authored comprehensive **design documents** and **system requirements specifications** complete with UML diagrams.

### Personal Website

- Designed a personal website from scratch that hosts my portfolio to showcase my side projects and interests.
- Created the website using **HTML, CSS, and JavaScript**, and using tools like **Bootstrap**; deployed using **Github Pages**.

## Skills

**Languages** Python, Java, C, C++, C#, Go, JavaScript, HTML/CSS, Verilog, Bash, SQL, MATLAB

**Frameworks/Tools** Git, TensorFlow, scikit-learn, LaTeX, Doxygen, Django, Bootstrap, AutoCAD, Photoshop, Premiere Pro, Microsoft Office