Sabrina Mansour

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# EDUCATION

## BACHELOR OF SOFTWARE ENGINEERING | McGill University | August 2020 - Present

Completion of Second Year of a Bachelor of Software Engineering at McGill University, in Montreal, Quebec. GPA 3.70 / 4.0.

## HIGH SCHOOL DEGREE | American School of Dubai | August 2016 - June 2020

Achieved a High School Diploma at the *American School of Dubai.* GPA 3.85 / 4.0.

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# SKILLS & ABILITIES

Skills:Leadership, positive, team player, collaborative, time management, people skills, organized

Languages**:** Fluent in English and French, intermediate in Arabic

Technology**:** L200 Java Programming, L200 Bash Programming, L200 C, L200 Python, L200 OCaml, Microsoft Office, Docker, Django, Celery, Postgres, Cucumber, JUnit, Umple, Gradle, Git, Github, JavaFX

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# EXPERIENCE

## DDMAL (Distributed Digital Music Archives & Libraries Lab) RESEARCH ASSOCIATE | Internship | May 2022 – Present

* The purpose of the research is to create technology that allows for music manuscripts to be uploaded onto a large scale digital library, Cantus DB.
* The user uploads their manuscript onto Rodan (website) and undergoes certain actions that allow for a trained AI model to differentiate between staff lines, text, and music notes. A different AI model then identifies the different types of notes and text and converts it to a machine readable structure (MEI encoding). Finally music historians can correct the results using Neon, an online neume editor.
* Worked backend updating the Rodan software from Python 2 to Python 3. This included updating specific code, changing software requirement versions, editing dockerfiles, and testing.
* Simplified the dockerfiles used in Rodan by decreasing build time and tested the resulting images.
* Updated our MEI encoding algorithms to use MEI version 5 rather than 4. This involved creating a new complex algorithm that ensured that all elements in the layers were sorted accordingly
* Ensured that all data and code on the database was updated to run in python 3

## ECSESS EVENT COORDINATOR  | McGill Engineering Committee | Fall 2021 - Present

* Member of the Electrical, Computer, Software Engineering Computer Society’s Event Committee.
* Help manage and set up a variety of events for McGill Engineering students.

## BIOMEDICAL RESEARCH ACADEMY  | University of Pennsylvania | July 2019

* Gained insight into the core of biomedical research through live daily lectures and faculty research talks held by scientists, clinicians, and faculty from the Department of Biology and Penn’s School of Medicine.
* Developed a deeper understanding of experimental design, cutting-edge technologies, and recent advances in high-interest fields of research.
* Participated in a small group investigation led by PhD students on current research in CRISPR Gene editing (particularly for Duchenne Muscular Dystrophy) as well as discussed peer-reviewed research articles in critical depth and worked as a team to present our findings.

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# AWARDS

## CODEJAM  | Fall 2021 | Best Enterprise Tool

* Developed a chrome extension, Social Mojo, that allows businesses or individuals to track their social media presence.
* Using the Facebook and Instagram API the extension gave key insights including post impressions, post engagement, reach, and event responses over time.
* The extension also performed sentiment analysis using a tensorflow model that we had trained which categorized instagram and facebook comments on profiles to get a live rating of your feedback.
* Applied software includes: React and typescript frontend, Flask backend with the tensorflow model hosted on a google-colaboratory and main API on AWS serverless using Node.js.

## GOOGLE MONTREAL HACKATHON | Fall 2021 | Second Place Overall

* Participated in the Google Montreal Hackathon and received second place for our website, DayTripper.
* Created a website during the 24 hour competition that would give tourists visiting Montreal a randomized daily itinerary.
* Using the Google Maps API and Directions API we were able to provide users an optimized daily route along with their itinerary, stopping at relevant restaurants, museums, etc.
* Other applied software includes: BigQuery, Firebase, Compute Engine API, NodeJS and React.

## COMMUNICATION IN ENGINEERING EXCELLENCE IN WRITTEN COMMUNICATION NOMINATION | Winter 2021

* Nominated and awaiting results for the Communication in Engineering Excellence in Written Communication Award for my paper “Recent Advances in Fibrous Scaffolds for Tissue Engineered Heart Valves”.
* The Committee adjudicates these papers based on the quality of ideas, rigor of research, organization of arguments, and clarity and precision of writing.

## EXCELLENCE BURSARY FOR COMPUTER SCIENCE, COMPUTER ENGINEERING AND COMPUTER CONSTRUCTION, AND ELECTRICAL, ELECTRONIC AND COMMUNICATIONS ENGINEERING  | Winter 2021

* One of the recipients of this scholarship for the 2020-2021 school year awarded by the Ministère de l'Enseignement supérieur (MES)