ALEX MOICA

www.alexmoica.com
alex@alexmoica.com
(613)-322-7342

Education

Hamilton, ON	McMaster University	Expected Graduation April 2022

- B.Eng. in Software Engineering (Co-op)

Work Experience

President	McMaster Engineering Society	March 2020 – Present

- Set the vision and direction of the MES for the upcoming year within the scope of complimenting student education through efficient use of our three-quarter million dollar budget; providing and supporting mental & physical wellness, academic advocacy & equity, social events, technical & non-technical engineering involvement, and engineering student culture & traditions.
- Led a team of seven Executives/Associate-Executives, providing guidance for their initiatives while ensuring a supportive and open team dynamic.
- Represented our 5500+ constituents to McMaster University as well as to provincial and federal organizations on academic concerns and legislation.

Program Support Assistant	McMaster Univeristy	March 2020 – August 2020

- Actively engaged in the virtualization of the McMaster Engineering undergraduate summer research program.
- Promoted student engagement, particularly as related to the virtual and in-person engagement of students with clubs, teams, and competitions while maintaining safety protocols.
- Welcomed the incoming cohort to the Faculty of Engineering through programs such as the MES Summer Mailout and EMBER (self-paced learning modules and daily, live, interactive tutorials led by upper year engineering students).

Vice President Academic	McMaster Engineering Society	March 2019 – March 2020

- Worked effectively as part of an executive team to lead the society through recent provincial regulations negatively impacting student societies, while greatly improving the value and efficiency of offered services.
- Liaised with the Dean, Associate Deans, and Faculty heads regarding academic issues impacting over 5500 students such as curriculum changes, academic fairness, and program restructuring.
- Organized/assisted all major academic initiatives of the Faculty of Engineering and the McMaster Engineering Society.

Projects

- **alexmoica.com (2020):** Personal professional website created to increase my internet presence while better advertising myself to potential employers. Written in pure HTML & CSS, implementing JavaScript for various animations and transitions. *Skills developed: HTML, CSS, JavaScript, Photoshop*
- *FriendFinder (2020):* Desktop application implementing graph data structures and Dijkstra's algorithm to find the shortest path from a user's current position to a designated location so that they would connect with an optimal number of friends on the way. *Skills developed: Java, Documentation, Git*
- **Food Image Recognition (2019):** Machine learning application created to distinguish between a variety of fruits and vegetables. Based on Tensorflow and using the CIFAR-100 database for training images, this application identifies user images, entered through a Tkinter GUI, by food type. *Skills developed: Tensorflow, Python, Git*

Activities & Leadership

Director of Public Relations   **McMaster Engineering Society**   **April 2018 – March 2019**

- Grew social media channels by over 40 000 engagements, and exemplified leadership and oral communication skills through communicating effectively with over 5000 students to create and promote events and activities.
- Organized MES representation to promote the McMaster Engineering Society and the engineering profession at EngFest, Faculty of Engineering Open Houses, and MES charity events.
- Coordinated all outreach, media recognition, ambassadorship, and mentorship programs of the McMaster Faculty of Engineering and the MES.

Design Coordinator   **McMaster Engineering Competition**   **Feb. 2018 – Nov. 2018**

- Implemented a creative and innovative challenge idea that tackles one of societies biggest engineering-related problems while offering aspiring engineers invaluable experience that builds confidence and competence in engineering.
- Created guiding documents, designed & constructed the testing apparatus used for judging the competitors submissions, and led the team of volunteers that kept the competition running smoothly.

Computer Science Mentor   **Google & McMaster Outreach**   **Oct. 2017**

- Mentored ~50 students from Huntington Elementary School in grades 5 to 8 on functional programming and how to understand and employ Elm, a programming language that compiles to HTML, CSS and JavaScript to create animated scenes.
- Taught students how to define functions and variables, employ mathematical concepts into their code, and manipulate objects properties under the supervision of Dr. Christopher Anand through the McMaster Outreach Program.

Skills Overview

- Industry Tools: *Linux (Ubuntu/Debian), Git, Tensorflow, Eclipse, LaTeX, Doxygen, Flutter, Android Studio, Photoshop/GIMP, Database Management Systems (IBM db2)*
- Technical Skills: *C, Python, Java, Bash, Go, HTML, CSS, JavaScript, NASM, ARM LEGv8, Verilog, Dart, MATLAB, Maple, Discrete Math, Data Structures & Algorithms, Requirements Specification*
- Non-Technical Skills: *Team Leadership, Technical Writing, Documentation, Crisis Resolution, Accountability & Reporting*
- Personal Skills/Hobbies: *Romanian (Fluent), French (Intermediate), Muay Thai (4 years), Skateboarding, Classical & Electric Guitar, Reading, Running*

Achievements

- Led the MES response to COVID-19 in an effort to continue providing our services to students and to keep them socially connected throughout the campus closure of McMaster University.
- As part of a team, successfully responded to the Student Choice Initiative policy implemented by the provincial government in 2019 (repealed) with a 71% retention in student MES membership.
- Finished the Waterloo Harvest Half 2019 half-marathon with a 5:21 pace.