ALEX MOICA

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Education

Hamilton, ON McMaster University

Expected Graduation April 2023

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

Work Experience

Cloud Software Developer Intern

SOTI

May 2021 - August 2021

- Created, implemented, and maintained application test cases and test coverage based on software requirements and technical specifications for all SOTI's product offerings.
- Worked collaboratively in agile, CICD development teams and independently managed my time to complete tickets related to managing and updating pipelines, updating user interfaces, creating stored procedures, and working on Cloud Management System APIs and Product Orchestration endpoints.
- Migrated the framework of our Cloud Management System solution (comprised of 84 projects), resolving dependencies and fixing any library issues encountered.
- Significantly reduced SQL server calls to under 100 per minute from the previously 1000's of calls a minute by implementing application side caching of commonly accessed tables.

President

McMaster Engineering Society

March 2020 - March 2021

- Set the vision and direction of the MES for the upcoming year within the scope of complimenting student education through efficient use of a 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 eight Executives/Associate-Executives, providing guidance for their initiatives, ensuring a supportive and open team dynamic, and building strong communication skills.
- Successfully represented our 5500+ students to McMaster University as well as to provincial and federal
 organizations on academic concerns and legislation.

Program Support Assistant

McMaster University

March 2020 - August 2020

- Ran the virtual McMaster Engineering undergraduate summer research program for over 100 students.
- Promoted student engagement, particularly as related to the virtual and in-person engagement of students with clubs, teams, and competitions while maintaining safety protocols.
- Managed the logistics of delivering over 4000 Welcome Week packages across Canada to incoming first year students, demonstrating strong organizational skills.
- Assisted in organizing self-paced learning modules and daily, live, interactive tutorials led by upper year engineering students for over 300 incoming first year 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 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 and assisted all major academic initiatives of the Faculty of Engineering and the McMaster Engineering Society.

Projects

• **Ebook Genesis (2021):** Python bot that can find and download any ebook from just its name. Using Internet Relay Chat channels to crawl existing ebook repositories and enabling file transfers through the Direct Client-to-Client sub-protocol of IRC. One of the only functioning, open-source, IRC ebook bots.

- Skills Developed: Python, Networking, Git
- 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, DNS, Networking
- 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.

Skills Overview

- Industry Tools: Linux (Ubuntu/Debian), Git, Visual Studio Professional, Microsoft Server Management Studio, Jira, Pipeline Management (Jenkins, GoCD), AWS DevOps, Eclipse, LaTeX, Doxygen, Android Studio, Photoshop/GIMP, Database Management Systems (IBM db2)
- Technical Skills: C#, C, SQL, Python, Java, Bash, Go, HTML, CSS, JavaScript, NASM, Verilog, Dart, MATLAB, Discrete Math, Data Structures & Algorithms, Requirements Specification, Software Validation & Verification
- Non-Technical Skills: Team Leadership, Technical Writing, Documentation, 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 rate for student MES membership.
- Finished the Waterloo Harvest Half 2019 half-marathon with a 5:21 pace.