Marek Strihavka

905 – 525 – 9140 | strihavka@mcmaster.ca | linkedin.com/in/strihavka | github.com/strihavka

Highlights of Qualifications

- Currently enrolled in level 4 of a 4-year Mechatronics Engineering co-op program at McMaster University
- Effective analytical and problem-solving skills developed from work on academic projects such as the Rock
- Climbing Route App & the Signal Decoder Circuit project
- Excellent leadership, communication and teamwork skills gained through 2+ years of work experiences
- Laboratory and project experience in designing, simulating, and verifying digital and analog circuits
- Experience with C++, C, Java, Python, MATLAB, SolidWorks

Education

Bachelor of Engineering, Mechatronics Engineering **Sept 2019 – April 2023**
McMaster University, Hamilton ON

- Cumulative grade-point average of 3.8 on a 4.0 scale; Dean's List for all semesters
- Awarded Faculty of Engineering Entrance Scholarship for academic excellence

Experience

Curriculum Coordinator | Venture Engineering & Science Camp **Sept 2021 - Present**
McMaster University, Hamilton ON

- Independently developed projects for students to execute during the summer programs
- Created 3 schematics and PCBs using Autodesk Eagle
- Utilized strong attention to detail when creating project reports and purchase requests
- Improved communication skills while explaining projects to supervisors and instructors

Instructional Assistant **Sept 2020 – April 2021**
McMaster University, Hamilton ON

- Organized and instructed tutorial sections for over 750 students for the Engineering Profession and Practice course
- Provided technical expertise and support to the faculty, instructors, and teaching assistants
- Facilitated design exercises and guided students through inquiry-based approaches

Software Analyst Co-op **May 2019 – Aug 2019**
Thales Rail Signalling Solutions Inc. Toronto ON

- Created, integrated, and programmed a diagnostic tool with Visual Basic for Applications in Microsoft Excel
- Analyzed data logs to verify operating conditions of communication-based train control systems
- Worked in a team of 7 to review specifications and receive feedback to improve system functionality
- Trained employees on the use of the diagnostic tool; further developing communication skills
- Developed engineering management abilities through planning and implementing product requirements

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Extracurricular Activities

Student Member | McMaster Sumobot Club **2020 - Present**
- Designed a 20x20cm autonomous robot whose goal was to push opponents out of the sumo-wrestling ring
- Used Autodesk Inventor to model the design's chassis to laser-cut it from sheets of acrylic

Primary Team Member | The Marauder Drones Club **2019 - Present**
- Member of the primary team consisting of 14 out of 158 total members
- Programmed a functioning quadcopter, which was designed for aerial photography

McMaster Men's Volleyball Team **2019 - Present**
- Named as an OUA First Team All-Star for the year 2017
- Awarded McMaster Athlete of the Week for the week of October 16, 2017

Projects

Rock Climbing Route Application **2022**
- Programmed a web application which allows users to take a picture of a rock-climbing route and upload their solution using stick figures
- Implemented the app with Python, Django, HTML, CSS, Bootstrap, JavaScript and jQuery

Digital Circuits **2021**
- Designed, simulated, and implemented a signal decoder circuit for a Sony TV remote using Autodesk
- Produced and presented a technical report to support the design, using Microsoft Word & PowerPoint

Pacemaker **2020**
- Crafted software documents to support the design of a safety-critical system in a group of 6
- Planned, wrote, tested, and debugged C++ code to be run on a Freescale microprocessor

Skills

Software:
- Autodesk Inventor
- Visual Studio
- C++, C
- Java
- Bash
- MATLAB Simulink
- MS Office Suite

Laboratory:
- SolidWorks Design
- Complex Calculations
- Statistical Processes
- Circuitry Analysis
- Mechanics & Software Design

Safety:
- WHMIS Trained
- Standard First Aid Certified

Languages:
- English
- French (Basic)
- Spanish