**Engineering Student**

20 McGill Street, Apt. 10, Montreal, QC H4E 2J9

514-222-2233 (Home) / 514-222-2222 (Mobile)

first.lastname@mail.mcgill.ca

**Education**

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| **Bachelor of Engineering, Electrical Engineering** | **Sept 2015 - Present** |

McGill University, Montreal, QC

* Edgar R. Parkins Scholarship, McGill University
* Finalist, Embedded Systems category, Microsoft ImagineCup Competition (2016)
* 1st Place, ECSE Robotics Competition, McGill University (2017)

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| **Diploma of Collegial Studies (Health Sciences)** | **Sept 2013 - Jun 2015** |

Marianopolis College, Montreal, QC

**Languages**

English (native language), French (fluent written, functional oral), German (basic oral)

**Technical Skills**

**Programming Languages:** Java, C, C++, MIPS assembly, VHDL/Verilog HDL, Perl, Python

**IDEs:** Visual Studio, Eclipse, Netbeans, CodeBlocks

**Numerical Software:** LabView, MATLAB, Mathematica

**Simulation Tools:** SIMULINK, SPICE, NI MAX, LogicWorks

**Publishing Software:** Adobe InDesign, CorelDraw, MS Office

**Engineering Experience**

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| **Research Student**  | **Summer 2017** |

Multimedia Signal Processing Lab, McGill University, Montreal, QC

* Implemented signal processing and system control algorithms using LabView
* Mastered the use of a National Instruments’ DAQ board to test and trouble-shoot designed circuits and faulty devices; converted the DAQ board to a synthesizer/keyboard
* Developed an audio program that converts the sound card into an oscilloscope, then uses the input signal from the microphone port to modulate the frequency and amplitude of a generated output wave
* Designed two peripheral devices for the aforementioned program: one senses water ripples, another generates voltage spikes using a magnetic marble
* Re-used electronic components and motors from out-dated devices to construct a wind-powered USB charger

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| **Research Student** | **Summer 2016** |

Mobile Robotics and Computer Vision Lab, University of Western Ontario, London, ON

* Tested and analyzed hardware and software components of a biped robot
* Developed control algorithms for motors in MATLAB & SIMULINK
* Designed electronic circuits and used various lab equipment, such as oscilloscopes and multi-meters, to trouble-shoot

**Projects**

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| **Design of a Light-Seeker** | **Winter 2017**  |

* Built a sensor using photo-resistors to determine whether a light source is to the right or to the left
* Implemented a discrete H-bridge that turns a DC motor towards the light source
* Currently researching a method to ramp the motor’s acceleration to create a critically damped system

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| **Microsoft ImagineCup Competition**  | **Winter 2016**  |

Montreal, Canada

Finalist - Embedded Systems category

* Developed a simplistic user-interface for a greenhouse for a third-world country
* Worked with Visual Studio in C# to create a program for an automated greenhouse embedded system

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| **Design of an Autonomous Search-and-Recover Robot** | **Fall 2015** |

Placed 1st - Design Competition

* Prepared both hardware and software subsystems for system integration
* Programmed in Java using Eclipse IDE
* Optimized algorithm efficiency for real-time performance on an embedded system
* Coordinated with teammates to organize project logistics such as time, budget, resources, and individual capabilities

**General Experience**

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| **Circulation Staff** | **Sept 2015 – May 2016**  |

Schulich Library of Science & Engineering, McGill University, Montreal, QC

* Staffed the Loans/Reserves desk at Schulich Library during evenings & weekends
* Provided rapid and friendly customer service to students & faculty
* Responsibilities included shelving books, and documentation & data entry using ALEPH library management software

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| **English Teacher** | **Sept 2014 - Jul 2014** |

First English (after-school program), Montreal, QC

* Encouraged students to communicate comfortably in English by organizing creative and energetic learning activities

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| **Founding President & Coach**  | **Sept 2013 - May 2015** |

Marianopolis Swim Club, Montreal, QC

* Created a student club at Marianopolis College for competitive swimmers
* Planned and supervised three fundraisers and four friendly competitions
* Improved leadership and communication skills through coaching