

Trevor O'Leary

[linkedin.com/in/trevor-oleary/](https://www.linkedin.com/in/trevor-oleary/)

Education

Senior at McGill University, Montreal, Quebec
Bachelor of Engineering – **Electrical Engineering**
CGPA: 3.63/4.0

Sept. 2015 – Dec. 2020

Professional Experience

Tesla Motors – *Body Controls Hardware Intern*

Sept 2019 – December 2019

- Detailed circuit validation on multiple production circuit boards
- Significant code contribution in Python to Tesla's automated testing platform
- Designed 2 PCBs for use in Tesla automated test hardware
- Debugging issues on individual circuit boards and in the vehicle

Extracurricular Projects

Electronics Subsystem Leader – *McGill Formula Electric FSAE*

June 2018 – on going

Awards

- 1st Place Engineering Design for EV class at Formula Lincoln 2019
- 1st Place Overall in EV class at Formula Lincoln 2019
- Lead electronic hardware designer for MFE 20, McGill Formula Electrics entry for the 2019 FSAE season
- Designing and manufacturing of PCB's with Altium Designer to be functional and to follow safety standards
- Integration and packaging of PCBs into 3D cad for effective use of space and harnessing
- Training new members joining electronics coming from various backgrounds and skill levels
- Contact and meet company representatives from around North America to secure team sponsorships
- Project and time management during classes and summer

Project Experience

Research Assistant – *Varitron Flexible PCBs, McGill University*

Feb. 2018 – on going

- Circuit drawing and PCB layout of ridged PCB for quality comparison and testing purposes
- Various design rules and requirements high yield mass production

ECSE 335 – Microelectronics Lab, McGill University

Sept. 2018 – Dec. 2018

- Designed, simulated, built and tested multistage operational amplifier
- Practical experience using common/differential mode amplifiers, buffer and outputs stages
- Measured frequency response and other characteristics with simulations and real-world testing

ECSE 403 – Control Systems Lab, McGill University

Sept. 2018 – Dec. 2018

- Designed numerous controller types for inverted pendulum system including LQR, and PID controllers
- Calculated and improved the dynamics of our system through analysis and testing

Hobbies & Activities

Music Production

- Create and produce my own original music including original instrumentation

Skills

Hardware

- Advanced experience with soldering, board prototyping, PCB testing and integration
- Applied experience with oscilloscopes, signal generators, analog circuit debugging and analysis

Software

- Electrical and mechanical CAD tools: **Altium, Siemens NX**
- Programming Languages: **Python, Git, MATLAB, Simulink, Java**