


# Viktor Veljanovski

Electrical Engineering at McMaster University

Very passionate about motorsports  
and Automotive Engineering.

Availability ranges between  
May 2023 – Sept. 2024.

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 LinkedIn

 Portfolio

 Hamilton, Ontario

## SUMMARY

Passionate student at McMaster University pursuing a B. Eng. in Electrical Engineering. Aiming to use technical knowledge to obtain a co-op placement and further develop as an engineer. Proficient with Hardware and Software aspects of electrical design.

## TECHNICAL SKILLS

Python	Altium Designer
C / C++	LTspice
MATLAB	Quartus
SQL	SOLIDWORKS
AutoCAD	Inventor
Keil µVision	MS Office

## KEY COURSES

- Logic Design
- Data Structures & Algorithms
- Electronic Devices & Circuits II
- Microprocessor Systems
- Advanced Probability
- Calculus I, II, III
- Linear Algebra
- Signals & Systems
- Electromagnetics II
- Principals of Programming

## EDUCATION

### McMaster University

B. Eng. Electrical Engineering

Sept. 2020 – April 2025

Cumulative Avg: 11.3 GPA (3.9 GPA)

## EXTRA-CURRICULARS

### MAC Formula Electric

Electrical Sub Team – McMaster University

Oct. 2021 – Present

- Using **Altium Designer** to design, analyze, and modify **PCBs** that meet FSAE standards for the fully electric racecar.
- Created the **wiring harness** from schematics to implement the **High Voltage** and **Low Voltage** controllers.
- Assisted in performing **design verification** by **impedance and continuity testing** of High Voltage controllers.

## EXPERIENCE

### Electrical Engineering Intern

AC Tesla Inc. – Burlington, Ontario

May 2022 – Sept. 2022

- Drawn 120+ **Single Line Diagrams** in **AutoCAD** for electrical power distribution systems used by the City of Hamilton, Data Centers, Hospitals, etc.
- Drafted **models** of proposed 3D modifications using **Autodesk Inventor** for implementation by various customers in their distribution systems.
- Assisted in performing testing (**Contact Resistance, Hi Pot, TTR, etc.**) and maintenance on High and Medium Voltage equipment (**Circuit Breakers, Transformers, Transfer Switches, etc.**)
- Assisted in preparing and performing **Arc Flash Studies** with the Chief Engineer.

### Engineering Intern

Irpinia Kitchens – Richmond Hill, Ontario

May 2021 – Sept. 2021

- Used **SOLIDWORKS 2019** for creating and constructing assemblies and sub-assemblies of kitchen cabinets.
- Updated the cloud **SWOOD Library** for use by Order Processors and Engineers including SWOOD Frames and SWOOD Boxes.
- Created a streamlined implementation system of .CSV files for **automation** of cabinet production in **SOLIDWORKS** using **Visual Basic**.

## PROJECTS

### Spatial Mapping Using Time-of-Flight

March 2022

- Designed and built an embedded spatial measurement system to acquire distance data and reconstruct the surrounding area graphically.
- Integrated a stepper motor and **ToF sensor** using **C** to measure distance and mapped the points using **Python** and **Open3D**.
- Used **I<sup>2</sup>C** and **UART** communication protocols between the sensor, microcontroller, and computer to transmit distance and angle data.

### Automated Arm for Sorting

January 2021

- Programmed the movement and operation of a gripper using sensor values as parameters to move a surgical tool within a container using **Python**.
- Implemented **Classes** for each container object to specify the needed attributes and simulated the program in **Quanser Labs**.

REFERENCES – AVAILABLE UPON REQUEST