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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647-937-3041



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 subassemblies 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 I²C 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.