Viktor Veljanovski

Electrical Engineering at McMaster University

Interested in Power Electronics, Microelectronics, and Electromagnetics. Very passionate about Automotive Engineering.

PORTFOLIO V

✉ veljanovski.viktor@gmail.com   📞 647-937-3041   in linkedin.com/in/viktor-veljanovski   📍 **Hamilton, Ontario**

SUMMARY

Passionate student at McMaster University pursuing a B. Eng. in Electrical Engineering. Aiming to use technical skills and knowledge to obtain a hands-on co-op placement and further develop as an engineer.

TECHNICAL SKILLS

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

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 industry standard programs such as **Altium Designer** to analyze and re-design **Printed Circuit Boards** 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** such as **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 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.
- Programming in **SOLIDWORKS** using **Visual Basic** for the implementation of .CSV files for **automation** of cabinet production.

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 sensor, microcontroller, and computer to transmit data.

Automated Arm for Sorting   January 2021

- Programmed the movement and operation of a gripper using sensor values as inputs 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