SAYON KATHIRGAMANATHAN

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SUMMARY OF SKILLS

- **Programming:** Python, C/C++, Java, HTML, CSS, JavaScript, PHP, SQL, MATLAB
- **CAD Software:** AutoCAD, AutoDesk Inventor, SolidWorks, ProDesktop
- **Technical Software:** Arduino, Altera Quartus, PSpice, MPLab, CodeWarrior
- Proficient in Microsoft Word, Excel, Publisher, Powerpoint
- Trained and certified in machine workshop safety, soldering
- WHMIS certified

WORK EXPERIENCE

Radio Frequency Engineer (CO-OP) | BLiNQ Networks

MAY 2020 – AUGUST 2020

- Modified existing production test stations to support new radio frequency modules introduced
- Used Python to develop and maintain production test applications for newly added radio frequency modules
- Analyzed and created production test reports on released products and found ways to improve test yield and test time
- Tested support for prototype radiofrequency modules

Electrical Rail & Transit Engineer (CO-OP) | Hatch Ltd.

MAY 2019 – APRIL 2020

- Worked on AutoCAD detailed design and drafting of signals systems for Ontario Northland Railway and Metrolinx as well as designing signal equipment room layouts for Ottawa's Confederation Line Extension project
- Performed engineering calculations with regards to grade crossing design and breaking analysis
- Provided testing support for commissioning of Canadian Air Transport Security Authority's Smart Lane security systems
- Designed training modules using Adobe Captivate by conducting research and coordinating with a team of engineers
- Assisted team leads with project management duties by using Microsoft Excel to create effective spreadsheets, forms, and databases to input, track, store, and retrieve data
- Assisted in the preparation of technical documents and presentation materials

EDUCATION

Bachelor of Engineering, Electrical Engineering (CO-OP) | McMaster University

Class of 2020

- Relevant Projects
  - Modeled and simulated a working robotic hand on Autodesk Inventor using gear ratios to print and assemble its parts (received A+)
  - Created a device using an Esduino that was programmed to display, in binary, the angle at which an accelerometer was held (received A+)
- Relevant Courses
  - **General Engineering:** Engineering Design and Graphics, Engineering Computation, Engineering Profession and Practice, Engineering Sustainability and Ethics, Engineering Economics
  - **Electrical Engineering:** Logic Design, Principles of Programming, Introduction to Electrical Engineering, Data Structures, Circuits and Systems, Electrical Devices and Circuits I & II, Electromagnetics I & II, Signals and Systems, Microprocessors, Introduction to Control Systems, Energy Conversion, Communication Systems

EXTRACURRICULAR ACTIVITIES

Electrical (Software) Team Member | McMaster Solar Car Project

SEPTEMBER 2017 – APRIL 2019

- Designed and built circuits that are used to activate solar cells to power a car
- Worked with Arduino and Pickit chips with MPLab to program solar cells and display screens that are used for the car