SAYON KATHIRGAMANATHAN

github.com/sayonk | sayon-kathirgamanathan | me@sayon.io | sayon.io

SUMMARY OF SKILLS

- **Programming:** Python, C/C++, Java, HTML, CSS, JavaScript, PHP, SQL, MATLAB
- **Technologies:** Arduino, Bootstrap, jQuery, MySQL, Git, Jira
- **CAD Software:** AutoCAD, AutoDesk Inventor, SolidWorks, ProDesktop
- 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 signal systems for Ontario Northland Railway and Metrolinx as well as designing of 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 2021

- 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
  - **Computer Science:** Principles of Programming, Data Structures, Computer Communication Networks
  - **Electrical Engineering:** Logic Design, Introduction to Electrical Engineering, Circuits and Systems, Electrical Devices and Circuits I & II, Electromagnetics I & II, Signals and Systems, Microprocessors, Introduction to Control Systems, Energy Conversion, Communication Systems, Digital Signal Processing, Power Electronics, Electrical Power 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