SAYON KATHIRGAMANATHAN





- Languages: Python, C/C++, C#, Java, JavaScript, HTML, CSS, PHP, SQL
- Tools and Frameworks: Bootstrap, jQuery, REACT, AWS, wxPython, MySQL, Git, Jira



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

Class of 2021 | Relevant Courses GPA: 3.7

- Relevant Courses
 - o Engineering Computation, Principles of Programming, Data Structures, Computer/Advanced Communication Networks



WORK EXPERIENCE

Full Stack Engineer Intern | 30 Friends

MAY 2021 - PRESENT

- Utilized an Agile / Lean software development process to produce exceptional work in a fast paced, start-up environment
- Created a login page using Python for the web application by hosting on an AWS server
- Converted the back-end code from C# to Python seamlessly and increased the speed and efficiency of functions
- Worked with front-end engineers to build the web application in **REACT**

Software Engineer Intern | BLiNQ Networks

MAY 2020 - AUGUST 2020

- Developed a desktop interface using wxPython which exponentially reduces the time taken to analyze the production data of radio frequency modules while also displaying graphs and creating a CSV file of the compiled data
- Constructed an interactive settings menu which allows engineers to seamlessly start testing for newly added modules by adjusting preferences for data input, analysis, and output
- Prepared and presented proposals to a team of engineers consisting of various disciplines which resulted in faster detection of production issues



PROJECTS

Board Game Simulator | Python Application

- Conceptualized and developed a multiplayer board game simulator by building an interface, using front-end library wxPython, which provides a fluid user experience
- Implemented back-end programming concepts such as data structures, graph theory, and game theory in **Python** utilizing a model view controller design pattern to monitor board game rules and alerts

Medical Clinic Website | Web Application

- Constructed a responsive landing page, based on the client's specifications, by using client-side programming technologies such as Bootstrap, jQuery, JavaScript, HTML, and CSS to achieve the desired aesthetic
- Developed a MySQL database which stores user booking data, as well as an email delivery system using PHP
- Created an appointment booking form which executes server-side functions when submitted, such as inputting data into the database and sending a post request to access the **PHP** API



EXTRACURRICULAR ACTIVITIES

Electrical (Software) Team Member | McMaster Solar Car Project

SEPTEMBER 2017 - APRIL 2019

- Designed and implemented circuits used to activate solar cells to power a project car
- Designed a robust monitoring and display system using Arduino