BRYNN DAVIS

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SUMMARY

- Well-versed in **OOP** using **JS, C#, Python, C++**
- Passion for full stack development in **ASP.NET** and **NodeJS**

WORK

Hardware Engineer | Curtiss-Wright Defence Solutions   Jan. - Apr. 2018

- Implemented a producer-consumer **multithreading** structure to solve a synchronisation problem between diagnostic outputs of multiple Intel processors with **Python**
- Optimised an Intel Coffee Lake Processor throttling test in **Python** by using finite difference method to recognise stable die temperature and reduced run time by ~20%

Full Stack Developer | Manulife Financial   May. - Sep. 2017

- Constructed a social platform web app for 200+ employees using **ASP.NET**, and **SQL**
- Saved 120+ hours of work by developing an **HTML** stripper in **JS** to iterate through legacy client files and upload the contents to a **SQL** database

Automation Engineer | Gypsum Technologies   Jan. - Apr. & Sep. - Dec. 2016

- Built an **OPC UA** server to deliver **COM objects** between factory machines in **C#**
- Reduced 3 engineering hours per manual test down to 15 minutes, while increasing the quality of returned results by developing a motor drive testing system written in **C++**
- Developed a desktop analytics app in **C#** that returns drive diagnostics from raw **encoder** data

PROJECTS

MNIST Digit Classifying Neural Network   Feb. 2018

- Trained a network through backpropagation by gradient descent and reduced overfitting through implementing L2-regularisation and the cross-entropy cost function

Pill-Dispensing Robot | McMaster Innovation Nation   May. 2015

- Led and coordinated a team of seven colleagues to engineer a prizewinning robot designed to help regulate medication management for memory impaired patients
- Created models in **Inventor**, machined components, and **3D printed** custom parts

EDUCATION

University of Waterloo, ON   Expected 2020

- 3rd year Bachelor of Applied Sciences in Honours Co-op Mechatronics Engineering