

# BRYNN DAVIS

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## SUMMARY

- OOP experience built in **Python, C#, JS, C++** with over 3 years of experience
- Extensive application development experience in **ASP.NET** and **NodeJS**

## EXPERIENCE

### Tesla, Automation Engineer

Sep. - Dec. 2018

- Constructed a unit testing framework in Structured Text for TwinCAT3 and an accompanying testing suite in .NET that can be used by individuals or as an automated Jenkins build tool
- Worked within a special projects team to design a high-tech conveyance system capable of asynchronous pallet transfers with "just in time" dynamic modular servo synchronisation

### Curtiss-Wright Defence Solutions, Hardware Engineer

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 Cannon Lake Processor throttling test in **Python** by using numeric methods to recognise stable die temperature and reduced run time by ~20%

### Manulife & John Hancock Financial, Full Stack Engineer

May. - Sep. 2017

- Constructed an **MVC** web app for 200+ employees using **ASP.NET** and **Selenium** to deliver a platform for anonymous internal feedback and implemented **dependency injection** for unit testing with **NUnit**
- Developed an **HTML** and **JS** source code correcting tool in **C#** with an **ASP.NET** interface to fix problematic **HTML** blocks in a **MySQL** database with dynamic schema adaptation

## PROJECTS

### Handwritten Digit Classifying Neural Network

Feb. 2018

- Obtained 93.14% accuracy on the MNIST dataset through backpropagation by **gradient descent** and reduced overfitting through implementing **L2-regularisation** and a **cross-entropy** cost function in **Python**

### Allergen-free Recipe Web App

Aug. 2017

- Built with **NodeJS** to provide a simple means for Anaphylactic people to find safe and fun recipes
- Used **IIFE** structured **JS** to retrieve recipes from an **AJAX** call to an API and handled the promise with various **GUI** updates using **JQuery** to manipulate the **HTML** and **CSS**

## EDUCATION

### University of Waterloo, ON

Expected Apr. 2020

- 3<sup>rd</sup> year Bachelor of Applied Sciences in Honours Co-op Mechatronics Engineering