# **Ethan** Bonnardeaux



in ethan-bonnardeaux-18676a178

# **Skills**

Python: NumPy, Matplotlib, Cv2, Pandas, TensorFlow • JavaScript: ¡Query, Handlebars, React HTML, CSS, C, Linux, Matlab, Solid Edge, Microsoft Office, Arduino

## **Education**

**Queens University** 

Kingston, Ontario

Applied Mathematics Engineering

September 2018 - Present

Computer and Communications option

# **Projects (GitHub)**

### **Shape Recognition**

Individually conceptualized and created a new approach to geometric shape recognition using inner radial symmetry. Found center of each shape, by using image moment equations. Analyzed data to determine best strategy for point classification of the image contours. Developed functions including algorithm to find minimum points on a graph. See documentation for full description.

#### Machine Learning

Currently, working on a machine learning model to predict a patient's score on the Unified Parkinson's Disease Rating Scale based on 18 features in the Parkinson's Telemonitoring data set. Estimated Completion date is May 28<sup>th</sup>, 2019.

#### Web Development

Created a personal website and a simple API webpage using React.js, HTML and CSS.

# **Experience**

### **Queen's Space Engineering Team**

September 2018 - January 2019

Learned basic Python and C++ programming techniques

Introduced to microcontroller processor programming

### City of Toronto Lifeguarding

March 2018 - Present

Responsible for surveying assigned area and ensuring the safety of all patrons

Fiesta Farms

April 2017 – August 2017

Responsible for cleaning store, stocking produce and customer support