Jason (Jianxing) Zhang

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Experience

Sunnybrook Research Institute | Focused Ultrasound Lab

Software development Intern   July 2018 – August 2018
- Used **3D convolutional neural networks** to classify ambiguous acoustic data in **Python** with **mxnet**, improving classification accuracy from 57.35% to **97.69%**
- Created graphical user interface in **MATLAB** to increase efficiency and robustness of labelling data

Software development Intern   July 2017 – August 2017
- Doubled efficiency by automating the 2D data labeling process using **MATLAB**
- Applied transfer learning techniques to **alexnet** (pre-trained neural network) to classify images, achieving an overall classification accuracy of **92.43%** using **MATLAB**'s Machine Learning Toolbox

Computer Science Club | Earl Haig Secondary School

Vice President   Sept 2017 – May 2018
- Explained complex deep learning and machine learning concepts to beginners in weekly meetings
- Organized club activities and weekly meetings with others administrative club members

Side Projects

Robin Hood | IOS-Android Hybrid App   March 2019
- Created using **Flutter** as a donation service that connects donors to recipients directly
- Features multiple user interfaces, connection to **Firebase** and Microsoft **Azure**' s computer vision **API**

Coordinate ++ | IOS application   April 2018
- Created using **Swift** as an organization tool to plan a student's life in **Xcode**
- Designed and developed the app interface and a final grade calculator

Tank o' Duel | Python game   May 2017
- 2 player tank game made with the **Pygame** library
- Map generation and score keeping based on **file IO**

Skills

- Languages: Python, C++, MATLAB, Swift
- Technologies: Git, SVN, Xcode, LINUX OS

Certifications

- CCNA2 Routing and Switching: Routing and Switching Essentials Certification
- CPA: Programming essentials in C++ Certificate

Education

University of Waterloo   Expected: 2023
Honours Computer Engineering