# **Jaden Wang**

647-782-9588 | jadenyjw@gmail.com | jadenyjw.ml | github.com/jadenyjw | linkedin.com/in/jadenyjw

#### **EDUCATION**

University of Toronto Scarborough - Honours Bachelor of Science

(Computer Science Specialist - Software Engineering & Statistics Major)

cGPA: 3.44/4.0 | September 2017 - September 2021

**Relevant Coursework**: Software Design, Software Tools and Systems Programming, Design and Analysis of Data Structures Computer Organization, Databases and Web Programming, Theory of Computation

#### **EXPERIENCE**

**University of Toronto Scarborough, ON** - Undergraduate Teaching Assistant

September 2018 - Present

- Led labs that taught computer science fundamentals and Python to over 700 students (Introduction to Computer Science I). Topics that were covered include sorting, file I/O, and Python internals.
- Taught the essentials of data structures and algorithms using C (Introduction to Computer Science II). Topics that were covered include complexity analysis, graph theory, and memory management.

# **Codefusion Communications Inc, ON** - Computer Analyst Intern

March 2016 - June 2016

- Saved 2+ hours per day by implementing automatic solutions to tasks, including managing internal servers and workstations, via PowerShell and Bash scripting.
- Assisted company clients with troubleshooting technical problems involving servers and workstations.

#### **PROJECTS**

#### Carnet2 - github.com/jadenyjw/carnet2-arduino

- Engineered a self-driving car with a trainable neural network that can maneuver through arbitrary paths.
- Designed and trained a convolutional neural network with 70% accuracy on self-collected data.
- Technologies Used: Software: Python, Keras, OpenCV | Hardware: Arduino

## Tanks - github.com/jadenyjw/tanks-backend

- Implemented a real-time multi-client server for a tank game accessible at <a href="https://tanks.ml">https://tanks.ml</a>, utilizing websockets for peer communication.
- Technologies Used: Backend: Node.js | Frontend: React.js, Pixi.js | Systems: NGINX, Google Cloud

## **DrawPVP** - github.com/jadenyjw/drawpvp

- Created a multiplayer game where players doodle against each other to have their drawings judged by a neural network with 85% test data accuracy.
- Implemented local area network transmission between multiple clients and a server.
- Technologies Used: JavaFX, DeepLearning4J, Kryonet

## Waveform Visualizer - <a href="mailto:github.com/jadenyjw/waveform-visualizer">github.com/jadenyjw/waveform-visualizer</a>

- Designed a hardware waveform visualizer that displays various audio transformations received through a microphone input and plays it back in real-time with transformations applied.
- Technologies Used: Verilog, FPGA

#### **LANGUAGES & TECHNOLOGIES**

Java | Python | C | Linux | Git | SVN | Javascript | HTML | CSS | SQL