# WAN SONG LEE

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### **EXPERIENCE**

#### **Teaching Assistant**

## September 2019 - April 2020

**University of Toronto** 

- Teaching assistant for Principles of Programming Languages and Neural Networks and Machine Learning
- Ran 3 weekly tutorials for 120 students, helping students review key concepts
- Conducted practicals for students, guiding students through sets of instructions and supervising them as they worked on the lab

#### **Research Assistant**

🛗 January 2020 - April 2020

**University of Toronto** 

- Used **PyTorch** to train a self-driving car that navigates using visual input and imitation learning from an expert human driver
- Performed literature survey to look into the possibility of attacking self-driving cars by adding malicious noise on billboards/traffic signs

### **PROJECTS**

#### **Course Crunch**

## January 2020 - April 2020

**Web Application** 

- Developed a React web application that gives course recommendation for students and various other services
- Designed RESTful backend microservices enabling user's schedule to be stored persistently in an online database
- Worked in a group of 7, following the **scrum** and **agile** development processes to develop efficiently
- Named best project by students and course instructor among 20 groups
- Tech stack: MongoDB, Express, React, Node.js, PostgreSQL, Neo4j

#### **Exam Scanner**

## Februrary 2019

**Python Script** 

- Used NumPy, OpenCV and scikit-learn to read student information from exam covers, then upload each students' test to their own repository on MarkUs.
- Reduced the amount of time for professors and teaching assistants to input grades from 2 hours to 2 minutes.
- Currently used by the Mathematical and Computational Science department to scan term tests and exams.

#### **Plastic Language**

September 2019

**Programming Language & Interpreter** 

- Built a small programming language in Racket
- Implemented variable declaration, data types, paterrn-matching, functions, higher order functions, recursion, lexical scoping, etc

#### **PaperAccess**

Ctober 2016

**Android App** 

- Used Java to build an Android app that helps students prepare for O-level exams by helping students download past exams and marking schemes easily
- Wrote a webscraper that searches for all available exams from an external website, then saves the results into a local SQLite database for caching to improve search time by over 20x

### **EDUCATION**

#### H.B.Sc. in Computer Science

**University of Toronto** 

## Sept 2016 - April 2020

Cumulative GPA: 3.58 Major GPA: 3.75 Final Year GPA: 4.00

Graduated with High Distinction Departmental Honors Roll 2019 - 2020 Dean's list 2019-2020

Relevant Coursework

Software Engineering Databases

**Data Structures and Analysis** 

Algorithm Design and Analysis

Operating Systems | Web Development

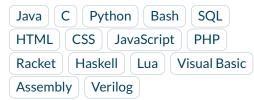
Systems Programming

Parallel Programming

Computer Networking

### **TECHNICAL SKILLS**

Languages



Library & Frameworks

| MongoDB                    | Express | React  | Node.js |
|----------------------------|---------|--------|---------|
| PostgreSQL                 | Neo4j   | JQuery |         |
| pandas NumPy PyTorch Spark |         |        |         |
| scikit-learn               | OpenCV  | CUDA   | ROS     |

Other skills

Git Linux Scrum Agile Latex
CI/CD AWS GCP

## **CERTIFICATION**



