Lemeng Dai

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EDUCATION

University of Toronto

Toronto, ON, Canada

Sep 2021 - May 2025

Bachelor of Science in Computer Science

• cGPA: 3.86

- Relevant Coursework: CSC110 (93%) and CSC111 (90%): Foundations of Computer Science
- Available for internship during May August 2023

SKILLS

- Programming Languages: Python, HTML/CSS, JavaScript
- Libraries: pandas, NumPy, Matplotlib, TensorFlow, Pygame, Plotly, scikit-learn, Keras
- Strong **self-education** skills and high levels of **self-motivation**, demonstrated through the following projects in which all the technologies used are self-studied except Python.

EXPERIENCES AND PROJECTS

Machine Learning Fellow at AI4Good Lab | Python, Jupyter Notebook, AWS, NumPy

April - June 2022

- Completed 7-week courses on Fundamentals of **Machine Learning** such as CNN, RNN, LSTM, NLP, BERT, and Reinforcement Learning.
- Worked with four other students and a mentor to develop **Reimagine**, a platform to help any group of people with the desire to read complicated text easily by converting them into simple, interesting stories. Developed this application using **text style transfer** model such as **GPT-2**.
- GitHub

TensorFlow - Help Protect the Great Barrier Reef | Python, TensorFlow, pandas, OpenCV

Jan 2022

- Led a team of four to build a model that detects starfish in underwater image data using **TensorFlow Object Detection API** and **transfer learning**.
- Used OpenCV to improve the quality of underwater images to enhance the model's accuracy.
- GitHub

Report on the Impact of Covid 19 (CSC110 Project) | Python, pandas, scikit-learn, Plotly

Dec 2021

- Used data scientific approaches to investigate as a team of four the correlation between the pandemic and the employment rate of each Province in Canada. Final grade of 97%.
- Completed data cleaning and preparation using **pandas** and built a model using **scikit-learn**. Created scatter plots and choropleth maps for visualization of the data.
- Concluded there's no strong correlation between Covid 19 cases and employment rate in Canada.
- GitHub

Personal Website | HTML/CSS, JavaScript

Feb 2021

- Designed and developed my personal website using HTML/CSS and JavaScript. It contains all my projects and videos.
- Personal Website GitHub

Flappy Bird Game | Python, Pygame

May 2020

- Developed a remake of the Flappy Bird game using **Pygame**. Utilized **objected-oriented programming** to develop the game. Created classes for different objects in the game.
- Demo Video GitHub

Smart Door Receptionist with Smart Lock System | Python, Raspberry Pi, HTML

Jan 2020

- Built a smart security system with Raspberry Pi. When a visitor rings the doorbell, the camera captures an image of the visitor and email it to the house owner. The owner then goes to a web page created with HTML and flask where he/she can control the door lock and choose to unlock the door or keep the door locked.
- Demo Video GitHub