

JUSTIN TRAN

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Current Work Objective: Seeking PEY Internship/CO-OP (May 2021 – September 2022)

Education

University of Toronto

September 2018 – Present

Engineering Science- Bachelor of Applied Science (BASc)

Toronto, Ontario

Major: Machine Intelligence and Software Engineering

Minor: Engineering Business

Coding Projects

StockTrader

December 2019

- Created an application in which a user can input the trade symbol of a stock on a Canadian or United States exchange and obtain a graph of the pricing data for the last 1500 minutes of open market time
- Utilized NumPy to convert raw data into simple moving averages, and Pandas to store data in an easily accessible way
- Used Matplotlib to automatically graphs close price as well as the 30-minute and 300-minute simple moving averages
- Wrote functions using NumPy to analyze graph intersections and SMA derivatives to advise buy or sell decisions
- Utilized the following python packages: NumPy, Pandas, Matplotlib, Sched, Threading, Requests, DateTime, tkinter

Chess, Chess Player

February 2019

- Wrote a program in which to facilitate a player versus player, and player versus computer, chess game
- Created a computer opponent by creating a multi-level search tree in which each branch contained the board states resulting from possible moves
- Applied the Min-Max algorithm to analyze board states and choose an optimal move

Experience

UofT Machine Intelligence Student Team

December 2019 - Present

Junior Developer

Toronto, Ontario

- Worked within a team of 8 on a shared GitHub repository to create a model which identifies house numbers from google maps street view
- Used TensorFlow and Keras to write one of the four neural networks which comprised the end model, as well as tested the neural nets of teammates through Tensorboard
- Product outperformed Convolution Networks in terms of image size scalability and computational requirement

University of Toronto

May 2019 – August 2019

Laboratory Intern

Toronto, Ontario

- Supervised by 2 Professors in the University of Toronto Institute of Biomaterials & Biomedical Engineering to conduct and report on 2 experiments which tested the effects of new drugs on bacteria colonies
- Learned how to handle equipment in a formal lab setting, and present data to outside stakeholders

Leadership Experience

CareGuard Team Lead

April 2019

- Was the team lead in creating a device called the CareGuard, to help reduce intrusions in the resident rooms at the Fairview Nursing Home from residents with dementia
- Worked collaboratively with Nursing home residents and staff to outline goals for the design, and created testing protocols as metrics for how well each potential design met these goals
- Worked with my team to research and develop testing conditions which replicate a wandering state of a resident with dementia
- Learned how to productively interact with stakeholders, and how to create and execute an action plan for delivering a demonstrable product in a constrained amount of time

Skills:

Programming Python, Java, C/C++, Web (HTML5/CSS3/JavaScript), SQL, MatLab, Git, Verilog, Assembly (ARM), Arduino, Microsoft Excel

Interpersonal Public Speaking, Teamwork, Client Relations, Microsoft PowerPoint, Microsoft Word

Languages English, Vietnamese