MY DUC TRAN

PROJECTS

Research Project: Empirical Assets Pricing via Machine Learning Sept. 2021
Ongoing research with professor Yi Yang (McGill) and professor Yan Liu (Purdue)

AI 4 Good Lab Apr. 2021
- Used Logistics Regression and SGD Classifier model to predict Autoimmune Disease flare up in the next hour based on user data
- Worked on React app to gather user data about food, weather, exercise time, etc...

NLP Tweet Disaster Detection Dec. 2020
- Performed **data visualization**, **data preprocessing** and **data cleaning**.
- Created NLP **Logistics regression** and Classifier model to detect tweets about the disaster with an **accuracy of 80%**.
- Implemented **BERT model with embedding**, achieved an **accuracy of 82.8%**.
- source code: NLP_tweet_disaters

MNIST Digit Recognizer Dec. 2020
- Built a classic **CNN model** to recognize handwritten digit with an accuracy of **99.7%, top 100 in Kaggle Competition**.
- Created a web demo for the client to predict their handwritten digits or with uploaded images using **Tensorflow and Javascript**.
- demo: mytran2111.github.io/DigitRecognizer_web_demo/

MAIS 202 - Kaggle Competition 1st place Nov. 2020
- Worked on MNIST problem to find the maximum of multiple digits in 2D images.
- Built **CNN model** and work on **Grid Search CV** and **Data Augmentation** to achieve **accuracy of 97.9%**.
- Wrote final proposal to demonstrate the process and the model architecture.
- source code: MNIST_Max-digits

WEB WHITEBOARD - Code Jam Hackathon 3rd place Nov. 2020
- Created a virtual whiteboard to reduce the challenge for students to attend online schooling.
- Built website by **Javascript, HTML, CSS and p5.js** for 2D graphics.
- demo: mytran2111.github.io/Code-Jam-2020/

CREDIT CARD FRAUD DETECTION Jan. 2020
- Creating a **machine learning model** to detect fraud transaction.
- Determining the Classification method for **an imbalanced dataset** with over **284,807 transactions and 0.72% fraud.**
- source code: Credit_card_fraud_detection

EMPLOYMENT

PwC LLP
Cyber Security Associate — Sept. 2021 to Apr. 2022
Work on Endpoint Protection and Data Loss Prevention for our clients

DRW Holdings, LLC — Montreal, QC
Software Developer Intern — May 2021 to Aug. 2021
- Working on NLP model for Trading Simulator in New Flow Team.

AWARDS

Edward W Beatty Scholarship July 2020
Scholarship for top 10% students in Mathematics.

Tomlinson Engagement Award for Mentoring Aug. 2020
Mentor for Linear Algebra I.

Net X Technology Case Competition 2021 · Honorable Prize Notos Technologies Mar. 2021
Strategized and implemented a NN model that lengthens drone flight times and saves critical battery life based on weather and wind real-time data.

NP Compete McGill - rank #6 Nov. 2020
Biggest Competitive Programming Contest at McGill.

Gold Medal in United Kingdom Senior Mathematical Challenge Dec. 2018
Invited to the British Mathematical Olympiads.

Leadership

VP External - McGill International Portfolio Challenge (MIPC) Feb. 2021
- Contacting and supporting 100+ teams registered for the MIPC.
- Organizing upcoming events for Ice Breaking and Introduction to Case Competition for this summer.

VP Finance - Competitive Programming at McGill Apr. 2021
- Managing financial expense and budget as well as working with sponsorship for our events.

CONTACT

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EDUCATION

McGill University 2019 to 2023
B.Sc Statistics & Computer Science
CGPA : 3.95/ 4.0
Relevant courses: Sampling Theory, Stochastic Process, Machine Learning, Algorithms & Data Structures, Competitive Programming.
Science Internship Year 2021-2022

SKILLS

PROGRAMMING LANGUAGES
Python
Java
C
R
HTML
JavaScript
CSS
SQL

ML/AI
Pytorch
tensorflow
scikit-learn
pandas
numpy
keras
kedro
docker

IDE
Visual Studio
Eclipse
Jupiter