Jizhou Wang

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Education

University of Montreal & **Mila** | Graduate Prof. MSc in Machine Learning	**2021 - Present**
McGill University | Undergraduate BSc in Statistics & Computer Science	**2015 - 2019**

Projects and Experiences

Hockey Goal Prediction|University of Montreal   **Fall 2021**
https://github.com/Jawing/ift6758-hockey-blog
- Performed exploratory data analysis on NHL play-by-play data by building an interactive 2D shot-heatmap using plotly and ipywidget.
- Developed a goal prediction service on flask with docker using the top-performing ensemble models (XGboost) based on their ROC-AUC in comet.ml.

Navigaze|Code Jam Hackathon   **2019**
https://devpost.com/software/navigreat-hviz0n
- Designed a browser extension that generates a table-of-contents from any webpage, text selection using keywords, key sentences for text summarization.
- Developed the backend extractive text summarization model using TextRank algorithm with spaCy and Flask.

Toxicity Detection in Text |McGill   **2019**
- Compared performances across different models such as CNN, LSTM, lexical using ROC-AUC metrics for detecting toxicity while maximizing group fairness across different identity subgroups.
- Worked with pre-trained transformer models (BERT, GPT) and word embeddings such as word2vec, GloVe.

SqueezeNet Reproducibility |McGill   **2019**
- Analysis of SqueezeNet architecture vs AlexNet on CIFAR-10 by ablation while maintaining the model size reduction intended in SqueezeNet.

Modified MNist Classification|McGill   **2019**
- Incrementally tested hyperparameters such as loss functions, optimizers, normalization, dropouts, preprocessing and augmentations (OpenCV) for image classification.
- Worked with state-of-the-art CNN models (Resnet, EfficientNet) and developed ensembles to further increase classification accuracies.

Irrelevant.ai |ImplementAI Hackathon   **2019**
https://devpost.com/software/irrelevant-ai
- Designed a movie recommendation system with a two-stage supervised learning model from Fast.ai using collaborative filtering and an unsupervised learning model on Scikit-learn with K-means clustering.
- Developed an algorithm that lets the user escape the recommendation feedback loop while maintaining a high predictive user rating.

Web Designer | Centre Saint-Antoine 50+, Montreal, QC   **2017**
http://centrestantoine50plus.org/

- Created a responsive mobile redesign of the website using jQuery, Bootstrap, and AngularJS and Improved the accessibility and ease of use for elderly clients.

Software Engineer Intern | Microsoft, Beijing, China   **2015**
- Maintaining web components and websites for new and existing user clients using HTML, CSS, jQuery, Bootstrap, and AngularJS.
- Prototyped "MicroFriends" a social networking app for interns on android/iOS during the Microsoft Hackathon

Skills & Interests

Computer Science: Meta-Learning, Continual Learning, Natural Language Processing, Computer Vision.
Software: Pytorch, Sklearn, NLTK, Git, Plotly, Docker, Flask, Aequitas, OpenCV, R Studio, MySQL.
Language: English, Mandarin (Fluent), French (Advanced), Japanese, Spanish (Intermediate).
Communication: Active Listener, Compassionate Communicator, Team Spirit, Public Speaking.
Music: My Youtube Channel, Certified Pianist (RCM), Regional champion (WSTMA). Performance on stage (Camerata Musica 2009). Amateur Jazz composer and rhythm game fanatic.
Sports: Cross country and table tennis regional competitor. Passionate figure skater and dancer.
Others: Enthusiast in digital art, photography, psychology and philosophy.