

MO KLEIT

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EXPERIENCE

Data Science Engineer - Machine Learning, Phyla

Jan 2022 – Present

- Implementing an NLP information extraction (NER + RE) pipeline to provide personalized recommendations to users.

Senior Machine Learning Intern, Caisse de Dépôt et Placement du Québec

May – Dec. 2021

- Designed and implemented information retrieval system to extract topics from 30,000+ earnings call transcripts.
- Conducted explainability and interpretability analysis of results using shapley values and log-odds ratio.
- Pitched POC of designed system to multiple senior directors managing more than \$3 billions portfolios.
- Obtained 90% balanced accuracy using XGBoost time series classification model to predict future economic regime.
- Implemented end-to-end pipeline to display classification results in a dashboard to be used by financial analysts.
- Conducted sentiment analysis of financial texts using BERT Hugging Face to predict top performing sectors of industry.

Machine Learning Lead - Mentor (contract, part-time), AI Launch Lab

May – Aug. 2021

- Gathered weekly business requirements from fintech startup CEO for cryptocurrencies time series project.
- Led 12 undergraduate students in researching and implementing time series clustering models for cryptocurrencies.

Software Engineer II, TEKsystems Global Services

May 2018 – May 2020

- Implemented insurance claims processing engine in Java/Drools for client generating \$680 millions yearly revenues.
- Led weekly technical and business presentations to VP technology and senior management of leading US insurer.
- Automated deployment process of the system using Docker and Kubernetes.
- Provided day-to-day training to client's software development teams.

Software Engineer Intern, TEKsystems Global Services

May – Sep. 2017

- Implemented full-stack Kanban board web app in Angular and .NET for TEKSystems staffing division in Montreal.

EDUCATION

M.Sc. Machine Learning, MILA, Université de Montréal

Sep. 2019 – May. 2022

B.Eng. Electrical, Minor Software, McGill University

Sep. 2013 – May 2018

PROJECTS

Voice Activity Detection: SpeechBrain open-source contribution

- Implemented VAD pipeline using Bi-LSTM model to extract speech boundaries in audio recordings in PyTorch.

Social Media Prediction, Regression

- Implemented regression models (ensemble models, XGBoost, linear regression, etc) to predict number of likes.

Text classification of Reddit posts

- Implemented Naïve Bayes from scratch to classify Reddit posts.

Topic modeling for text documents using Latent Dirichlet Allocation

- Implemented and trained LDA model to extract topics from large collections of documents.

Closing robotics reality gap using CycleGAN

- Trained CycleGAN model and generated augmented realistic images based on training images from simulator.

Comparison of generative and discriminative classifiers

- Implemented and compared performance regime of SVM, Random Forest and Naïve Bayes on three datasets.

LEADERSHIP EXPERIENCE

President of the Social Committee, TEKsystems Global Services

Jan. 2019 – Apr. 2020

- Led and managed team of 5+ volunteers by planning and executing all social events with a budget of 20,000 USD.

Varsity Soccer Player, McGill University

Sep. 2013 – Jan. 2018

- Committed to 25+ hours of training, games, and video sessions. Designated ALL-STAR player in Quebec in 2016.

TECHNICAL SKILLS

Languages: Python, Java, SQL, Drools, C, C#, Gherkin, Typescript, HTML, CSS

Technologies: NumPy, Pandas, Scikit-Learn, Hugging Face, PyTorch, AWS, SHAP, Plotly, Docker, Kubernetes, Angular, Hibernate