

## EXPERIENCE

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

May – Nov. 2021

- Conducted sentiment analysis using BERT on Bloomberg earnings calls to predict top performing sectors of industry.
- Implemented topics extraction model to identify and retrieve emerging trends in Bloomberg earnings calls.
- Implemented time series regression and classification models to predict economic indicators and business cycles.
- Implemented scripts to automate data retrieval and preprocessing.
- Performed exploratory and statistical analysis to provide data insights through visualizations.

### AI Specialist (part time), AI Launch Lab

May – Aug. 2021

- Gathered requirements from AI start-up clients to define project tasks: time series for crypto and NLP for SDG.
- Managed and guided undergraduate students in implementing machine learning solutions.

### Software Engineer II, TEKsystems Global Services

May 2018 – Apr. 2020

- Implemented business rules engine in Java and Drools to automate client's claims insurance processing system.
- Automated deployment process of the engine on client's server using Docker and Kubernetes.
- Provided day-to-day expertise and training to clients through technical demonstrations and presentations.
- Conducted a test-driven-development approach to test system at unit, feature and system level.

### Software Engineer Intern, TEKSystems Global Services

May – Sep. 2017

- Designed and implemented single-page web application of digital Kanban board using Angular 2.
- Implemented back-end features such as e-mail sending service and login/sign up in .NET.

## EDUCATION

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

Sep. 2019 – Dec. 2021

### B.Eng. Electrical, Minor Software, McGill University

Sep. 2013 – May 2018

## PROJECTS

### Voice Activity Detection: SpeechBrain open-source contribution

- Implemented VAD pipeline to detect speech regions in audio signals using PyTorch and SpeechBrain.

### Text classification of Reddit posts

- Implemented and tested 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.

### Ethereum decentralized voting application

- Deployed and implemented voting dAPP on Ethereum Blockchain private network.

## 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, Drools, C, C#, Gherkin, Typescript, MATLAB, OCaml, SQL, HTML, CSS

**Technologies:** NumPy, Pandas, Scikit-Learn, Hugging Face, PyTorch, AWS, SHAP, Docker, Kubernetes, Angular 2, Hibernate