MO KLEIT

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EXPERIENCE

Data Scientist/Machine Learning Engineer, Injoy   Jan 2022 – Present

Injoy is an early-stage start-up that aims at helping people with IBS/IBD understand how their diet, symptoms, and microbiome are all connected using our tracking app along with an at-home stool testing. We provide them with personalized recommendations.

NLP Information Extraction: provide personalized recommendations to users to better manage their diet and symptoms.
- **Analyzed** stakeholders needs, **defined requirements** and **designed** AI solution to provide users with personal rec.
- **Implemented** and **trained Named Entity Recognition** and **Relation Extraction** machine learning models to extract medical entities and classify relationships between them. Respectively reached a score of **80%** and **90%** f1-score.
- **Deployed** information extraction pipeline in **AWS** using **Docker**, **ECR** and **ECS**.
- **Launched information extraction pipeline** to automatically identify, classify and extract recommendations from biomedical literature, **scaling the company's recommendations database by 400%,** saving thousands of dollars on hiring medical experts.
- **Created postgresSQL** database and **designed** data model to store results from the information extraction pipeline.
- **Implemented and launched** recommendation system in **postgresSQL** to provide **personalized recommendations** to users with the objective of boosting and maintaining **user growth** through successful recommendations acceptation by users.

Data annotation pipeline: create an annotation pipeline to speed up labeling of the data.
- **Built process** for data annotation and **defined KPI** to ensure consistent annotation between team of 3 data scientists. **Iterated** until reaching success with an almost perfect **KPI** score as defined by the **Fleiss Kappa Score of 0.82.**
- **Launched** *information retrieval pipeline* to retrieve and parse **13k research papers**, **reducing** processing time by **85%**.
- **Launched** data annotation pipeline with Prodigy **reducing annotation time** by **a factor of 2.**

App design: design screens to track and rate users' data.
- **Wrote requirements** based on users' and doctors' interviews with the goal of tracking users' symptoms and diet.
- Designed **screens mockups** using **Balsamiq** framework to capture users' symptoms and diet.

Senior Machine Learning Intern, Caisse de Dépôt et Placement du Québec   May – Dec. 2021

Information retrieval: design an information retrieval pipeline to reduce research time for financial analysts.
- **Designed information retrieval pipeline** to **extract and rank 20k+** topics from **30k+** earnings call transcripts.
- Pitched **MVP** of designed system to multiple portfolio managers **($3+ billion dollars of assets**), successfully **landing** project.

Time series forecasting: forecast a macroeconomic indicator to predict probability of change in economic regime.
- Led **client interview** with major US Bank to understand how the indicator was constructed by quant researchers.
- **Launched** end-to-end forecasting pipeline to display results in a dashboard to be used by financial analysts.

Machine Learning Lead (contract, part-time), *AI Launch Lab*   May – Aug. 2021
- **Analyzed** needs and gathered requirements from start-up CEO. **Led** 12 undergrads in implementing ML solutions.

Software Engineer II, *TEKsystems Global Services*   May 2018 – May 2020

Digital Kanban board: build single-page web app for company's staffing division.
- Collaborated closely with **PM and UX** to understand and implement front-end/back-end (Angular 2 and .Net) user stories.
- **Shipped** web application to staffing team which considerably improved their productivity.

Insurance claims processing system: building a business rules engine.
- **Led** weekly technical and business presentations to VP technology and senior management of leading US insurer.
- **Launched** business rules engine in Java and Drools supporting generation of **$680 million** yearly revenues.

EDUCATION

M.Sc. Machine Learning*, MILA ML LAB, Université de Montréal*   Sep. 2019 – May 2022

B.Eng. Electrical and Software, *McGill University*   Sep. 2013 – May 2018

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, Postgres, SQL, Typescript, HTML, CSS, Drools, C, C#, Gherkin

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