SHEK MAN (VINCENT) CHU

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Professional Experience

Accelex Technology Limited, Toronto, ON   **May 2022 – Present**
Data Scientist

- Implemented A/B testing and analyzed user journeys in collaboration with the UX team, leading to the introduction of shortcuts and bulk actions that streamlined user interactions and lowered user effort.
- Designed and built a Databricks SQL dashboard for continuous monitoring and visualization of our machine learning-based document parsing product's performance over time, powered by an automated data pipeline that integrates AWS S3, ArangoDB, and our proprietary parser to regularly assess the performance of the latest parser version.
- Evaluated outputs from multiple machine learning models and implemented post-processing techniques, enhancing data extraction accuracy through regression testing against ground truth data.
- Collaborated with the product team to test and maintain ground truth data for performance monitoring.
- Developed and maintained a set of regular expressions to standardized naming conventions from documents.

Data Analyst, Product

- Designed and implemented a Key Performance Indicator (KPI) along with the underlying querying logic to effectively capture and showcase the product's performance.
- Analyzed production data and formulated an enhancement plan to optimize parser stack performance, achieved an increase of over 30% in data point capture accuracy within two sprints through the identification of high-impact actions.
- Collaborated with 30+ customers to develop a templating engine using Python to output data in customized format for direct integration with clients' data backend.
- Actively involved in the execution and maintenance of a Python CRON job that is responsible for migrating data nightly from unstructured data in Arango to tabulate data in Postgre to power our internal analytics pipeline.
- Collaborated closely with the sales team to understand client requirements, preparing comprehensive analysis tailored for proof-of-concept presentations and showcased the product's functionality and value proposition to stakeholders.
- Utilized insights from client interactions to inform UI design decisions and prioritize feature implementation based on feature importance and resourcing considerations.

Department of Economics, University of Toronto, Toronto   **Sep 2021 – Dec 2022**
Research Assistant

- Conducted data processing and exploratory data analysis using R to uncover relationships within experimental data.
- Performed Kolmogorov-Smirnov tests to assess the impact of varying levels of information provided on participant behavior.
- Analyzed the effect of feedback on the risk preference of the test subjects, simulating the learning progress and effect of experience on individuals' ability to gauge unknown risk.

Education

Faculty of Arts and Science, University of Toronto   **Toronto, ON**
Honours Bachelor of Science, Double Major in Economics and Statistics   **2017-2022**

- **Academics:** cGPA:3.6/4.0, High Distinction
- **Relevant Courses:** Methods of Data Analysis, Econometrics, Machine Learning, ML Application in Macro Finance

Projects

Machine Learning Project – Assessment on CNN fine tuning methods, Toronto, ON   **June 2022**

- Conducted comparative analysis of a fine-tuned pre-trained and a custom-built Convolutional Neural Network (CNN), focusing on the effects of available training data volume and similarity to the original pre-trained model dataset.

Additional Information

- **Skills**: Python, R, Excel, Git, TensorFlow, Hugging Face, SQL, AWS, Databricks, Linux, LangChain, Vector Stores, TDD
- **Languages**: Fluent in English, Cantonese, and Mandarin