Jackie Niu

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SKILLS

Languages: SQL, Python, R, C++, Java

Tools: dbt, Power BI, GA4, Amplitude, Looker, Microsoft Products, Unix, scikit-learn, TensorFlow

EXPERIENCE

Super.com   Jan 2024 — Aug 2024

Product Analyst

- Conducted and analyzed **A/B tests** to determine business feasibility of new features, in order to successfully convert and retain new-coming subscribers
- Developed a predictive service using **MLFlow** to forecast M1 churn of subscribers by analyzing user behaviors and attributes, providing insights to attract and retain high-value customers
- Designed **Looker dashboards** to visualize revenue metrics, assisting in the decision making process for subscription retention and revenue

Marketing and Growth Analyst

- Designed **Amplitude** and **Looker** charts and models to retrieve mid-funnel marketing performance metrics, which was used to identify areas that can be improved to increase overall conversions
- Collaborated with stakeholders across multiple departments and provided **SQL queries** to analyze event and user data, facilitating informed decision-making and strategic planning
- Transformed data via **dbt models** to automatically update frequently-used queries, while keeping important information version-controlled and reviewed

Environment and Climate Change Canada   Jan 2022 — Aug 2023

Senior Data Analyst — Air Quality Team

- Developed a **web-scraping** program that retrieves smog warnings in Quebec, generates comprehensive spreadsheets for critical data, and automatically integrates updates to a Power BI dashboard through **Power Automate**
- Designed an interactive dashboard using the **Plotly** library to present air quality forecasts and observations of **50 000+** data points, providing accessibility for hundreds of users across various operating systems
- Developed Python services for efficient reading of **4 000+** files, incorporating **automated email** notifications for identified errors and proposed changes for error prevention
- Created **shapefiles** accurately depicting **200+ locations** across Canada using **QGIS** and Google Earth

Data Analyst — Air Quality Team

- Designed and developed an interactive dashboard on **Power BI** that ingests **50 000+** air quality data points to produce and visualize real-time analytics, including air quality performance indicators and health risk
- Evaluated accuracy of air quality forecast using standard statistical analysis measures via **DAX functions**
- Developed a service in **Python** that receives air pollutant data and produces spreadsheets of the pollutants, categorized by properties such as type and date, using **Pandas** and **Openpyxl**

Data Analyst — Climate Team

- Created a **Python** data parser and visualizer that produces spreadsheets of real-time and historical weather-related events, e.g. road closures, climate warnings, from public RSS feed data
- Implemented precise weather location-tracking accurate to **110 meters**, as well as ingestion, processing, and cleaning of weather conditions data via **Pandas**, **NumPy**, and **GeoPy**
- Developed a dynamic dashboard in **Power BI** analyzing ECCC's data services and producing client-specific request and response metrics, visualized by region, sector, etc. in interactive tables and histograms

EDUCATION

University of Waterloo

BASc, Honours Mechatronics Engineering