Vincent Lau

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PROFESSIONAL EXPERTISE

SQL | Python | Scikit-Learn | Pandas | NumPy | Power BI | GCP Suite | ETL | Git

WROKING EXPERIENCE

Glocal Foundation, Inc — Vancouver, CA
Sr. Data Engineer, Analytics — May 2024 – Present

- Leveraged data to drive insights that support clinical research, streamline the process of analyzing patient data and medication usage, and enable decision-makers to understand trends and outcomes, ultimately improving patient care
- Performed **ad-hoc analysis** through extracting **400MB+** data from Caboodle database from EPIC system, optimized **SQL** queries which increasing executing speed by **20%**
- Implemented data cleaning including handle Missing Value, duplicates, and outliers using **Python (Pandas, NumPy)** to provide **3+** cleaned dataset to analyze effectiveness of medication, increasing data consistency by **17%**
- Developed a centralized interactive dashboard via **Power BI**, integrating **10+** tables and conducting **deep-dive analysis**, enhancing surgeons' understanding of medication preferences (GLP-1s) among different patients group

Defend Technology, Inc — Vancouver, CA
Data Engineer, Analytics II — 2023 – 2024

- Designed **Customer Scoring System** by segmenting and tagging customers using the **RFM** model, addressing data skewness through various pre-processing techniques such as log transformation, and feature engineering to enhance segmentation accuracy and improve system performance
- Created **10+** customer segmentation analysis **Tableau** dashboards through designing **KPIs** and interactive sub-charts to reveal different customer tier's distribution and demographic info, and purchase preference
- Leveraged the **Scikit-Learn** library to forecast membership type sales by fitting models including ARIMA, SARIMA, Linear Regression, and Decision Tree, achieving **78%** accuracy, with **LR** showing the best fit
- Provided data-based insight to help marketing co-workers design **campaign strategy**, increasing revenue by **8% MoM**

Rainer Technology, Inc — Beijing, China
Data Engineer, Analytics I — 2019 – 2023

- Achieved banking digital transformation and data **ETL pipeline** via stored procedures development in **DB2**
- Optimized **30+** index in an existing **2GB+ DB2** database, improving system query performance by **70%**
- Automate data loading and logging processes through **Shell** scripts resulting in **1 FTE saving**

Huaxia Diantong, Inc — Beijing, China
Business Intelligence Engineer — 2019

- Conceptualize measurement framework and maintain dashboards of key metrics on business health
- Established **MySQL** data warehouses ensuring data consistency and reliability, controlled **SQL** code version by **Git**

EDUCATION

University of Nottingham — Nottingham, UK
M.S. in Artificial Intelligence — Jul 2021 – Dec 2022

Guangxi Normal University — Guilin, China
B.S. in Computer Science — Sep 2016 – Jul 2020