

Zheng (Zeni) Zhang

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EDUCATION

University of British Columbia

Master of Data Science **GPA: 4/4**

Kelowna, BC, Canada

Sep. 2023 – Jun. 2024

McMaster University

Bachelor of Science Mathematics & Statistics **GPA: 3.7/4**

- Awards: Deans' Honour List

Hamilton, ON, Canada

Sep. 2019 – Jun. 2023

SKILLS

- ✓ **Software & Platforms:** Python, SQL, R, SAS, MATLAB, Excel (Macros, VBA); Power BI, Tableau; GitHub
- ✓ **Libraries:** Pandas, NumPy, Scikit-Learn, PyTorch, TensorFlow, SciPy, Plotly, Seaborn; tidyverse, dplyr, ggplot2, spatstat
- ✓ **Core Competencies:** Data Analytics, Data Visualization, Business Intelligence, Machine Learning (Decision Trees, Random Forest, Clustering, K-Nearest Neighbors), Natural Language Processing, Statistical Modeling, Time Series Analysis

PROFESSIONAL EXPERIENCE

GreenSpace Health

Data Analyst – Capstone Project

Kelowna, BC, Canada

May 2024 – Jun. 2024

- Enhanced therapist-patient matching on **Python** for a clinic management platform, leveraging **SQL** queries on 1M+ records from Snowflake and **machine learning models**, leading to a projected 5% improvement in patient satisfaction (TA Score).
- Applied Random Forest regression for **predictive modeling** to identify key factors influencing TA Score, such as first session feedback score, assessment completion rates, and multiple match attempts.
- Designed a clustering-based scoring mechanism to optimize initial therapist-patient assignments, minimizing manual bias and boosting patient participation.
- Collaborated with **cross-functional teams**, including engineering and project management, to integrate insights into the platform, delivering a data-driven decision-making framework for clinics.
- Presented findings to stakeholders via a dynamic **Tableau** dashboard, allowing simulation of potential advancements and visualization of their results, providing actionable recommendations to elevate patient experience.

Henan Institute of Geophysical Spatial Information Co., Ltd

GIS Data Analyst Intern

Zhengzhou, China

May 2023 – Aug. 2023

- Upgraded an automated land **classification model** within a GIS SaaS platform, increasing classification accuracy by 4% to support platform analytics and decision-making for environmental monitoring and urban planning.
- Refined model performance by assessing misclassified land types, optimizing feature selection, and adjusting hyperparameters (e.g., learning rate, batch size) in a deep learning framework for more precise land-use categorization.

Worhe International (Hong Kong) Co., Ltd

E-commerce Data Analyst Intern

Dongguan, China

May 2021 – Sep. 2021

- Streamlined the acquisition and consolidation of multi e-commerce platform data with VBA, generated **Power BI** to track sales trend and marketing impact, reducing manual processing time by 80% and enabling real-time strategic decision-making.
- Conceptualized **A/B tests** to run **statistical tests** on SEO indicator, measuring click-through rates and keyword effectiveness, restructured the product listings to strengthen visibility and user affinity, leading to a 30% increase in conversion rate.
- Performed pricing sensitivity and elasticity assessments to develop data-informed promotional strategies by identifying high-sensitivity products, led to a 20% growth in weekly sales volume.

PROJECT EXPERIENCE

Stock Data ETL Pipeline

Oct. 2024 – Nov. 2024

- Architected and deployed an automated end-to-end ETL pipeline on GCP (Google Cloud Platform) using Airflow and Docker, connecting Yahoo Finance API stock data into MySQL databases for structured analysis and streamlined data workflows.
- Built interactive **Tableau** interface for stock trends, evaluate financial metrics, and forecast market behaviors, empowering stakeholders to identify key investment opportunities and modify portfolio allocation.

Retail Sales Dashboard

Feb. 2024 – Mar. 2024

- Created a responsive **customer behavior visualizaton** employing Python's Plotly, combining RFM modeling & K-means clustering to segment customers and examine engagement, retention and purchase behavior.
- Formulated a sales **forecasting model** utilized ARIMA to predict regional demand trends, guiding inventory management and region-specific marketing efforts. The improved demand predictions reduced stock shortages by 20% and gained revenue by 3% ensuring products were available in the right regions.