

# Zheng (Zeni) Zhang

Burnaby, BC | Tel: 647-887-4907 | Email: [zhangzz1218@gmail.com](mailto:zhangzz1218@gmail.com)

Website: <https://zhangz128.github.io/> | LinkedIn: <https://www.linkedin.com/in/zhangz128/> | Github: <https://github.com/zhangz128>

## 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*

**Hamilton, ON, Canada**

Sep. 2019 – Jun. 2023

- **Awards:** Deans' Honour List

## 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 Processing, Data Cleaning, Data Validation, Data Analytics, Data Visualization, Business Intelligence, Machine Learning (Decision Trees, Random Forest, Clustering, K-Nearest Neighbors), Statistical Modeling

## PROFESSIONAL EXPERIENCE

### GreenSpace Health

*Data Analyst – Capstone Project*

**Kelowna, BC, Canada**

May 2024 – Jun. 2024

- Developed a **therapist-patient matching model** for a clinic management platform, leveraging 1M+ records from **Snowflake** and machine learning to improve patient satisfaction (TA Score) by a projected 5%.
- **Engineered new features** by quantifying key business concepts, addressing missing demographic data through collaboration with customer representatives. Built a **Random Forest regression model** to analyze key drivers of TA Score, utilizing **SHAP analysis** to determine rematch attempts as a major impact factor in patient satisfaction.
- Proposed a **scoring-based therapist matching system** to replace manual assignments, integrating clustering and patient similarity measures to optimize first-match success rates. Designed an **evaluation framework** by comparing predicted matching scores with historical TA Scores, validating a success rate increase from 45% to 60% for multiple-attempt patients.
- Implemented a **Tableau dashboard** to visualize improvements, enabling stakeholders to simulate matching strategies.

### Henan Institute of Geophysical Spatial Information Co., Ltd

*GIS Data Analyst Intern*

**Zhengzhou, China**

May 2023 – Aug. 2023

- Created a dynamic **Power BI dashboard** to monitor POI data quality, executed error detection logic in **Power Query** to categorize anomalies, allowing real-time tracking of corrections and ensuring data accuracy improvements in the **Oracle database**.
- Utilized **SQL** to correct identified errors, automatically filling missing values from reference tables while manual validation for complex cases, leading to an 18% reduction in data inconsistencies.

### Worhe International (Hong Kong) Co., Ltd

*E-commerce Data Analyst Intern*

**Dongguan, China**

May 2021 – Sep. 2021

- Consolidated data from multiple e-commerce platforms and streamlined weekly **reporting** on sales performance, advertising impact and inventory status through calculating and visualizing with **VBA** and Pivot Tables, cutting manual workload by 80% and improving decision-making efficiency.
- Examined ACOS advertising outcome and keyword effectiveness, uncovered consumer pain points, and refined product listings. Conducted **A/B testing** to validate **SEO** metrics, resulting in a 30% increase in conversion rate.
- Assessed competitors sales data to address **overstock issues**, applied targeted pricing strategies for high-elasticity products and bundling tactics for low-elasticity items, leading to a 20% increase in weekly sales and the clearance of 90% of slow-moving products.

## PROJECT EXPERIENCE

### End-to-End Stock Data ETL and Visualization

Oct. 2024 – Nov. 2024

- Established an scalable **ETL pipeline** on Google Cloud Platform (**GCP**) to extract, transform, and store stock data from Yahoo Finance **API** into **MySQL**. Containerized the project with **Docker** and integrated Apache **Airflow** to automate workflows and schedule data processing tasks.
- Handled and enriched stock data, including historical prices, financial reports and company news. Applied transformations such as currency standardization, stock return calculations, and moving average computations to enhance data usability.
- Organized financial datasets to support analysis of stock trends, trading volume, and sector distribution, providing structured insights for further exploration.
- Assembled an interactive **Tableau dashboard** to showcase stock price trends, cumulative returns, and industry-based performance metrics, allowing clear visualization of market movements.