

Zheming Lian

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EDUCATION

UNIVERSITY OF MINNESOTA - Carlson School of Management, Minneapolis, MN

Master of Science in Business Analytics

May 2020

UNIVERSITY OF WISCONSIN - MADISON, Madison, WI

Bachelor of Arts (Graduated with distinction) in Statistics & Mathematics

May 2019

EXPERIENCE

MIS Research Center, University of Minnesota, Minneapolis, MN

May 2020-Present

Volunteer Research Assistant

- Developing a Tableau dashboard tracking sub-state level hospitalization data to measure impact of COVID-19 on national and local healthcare infrastructure.
- Designing and maintaining a PostgreSQL database to support internal and external research need.

CARLSON ANALYTICS LAB, Minneapolis, MN

Analytics Student Consultant

Client: Leading Hospitality and Entertainment Business

Nov 2019 – May 2020

- Optimized changes in store layouts by segmenting products using DBSCAN algorithm and predicted revenue using a convolutional neural network, increasing monthly revenue by 3.3%.
- Built a Tableau dashboard to communicate model outputs, providing actionable insights to cross-functional stakeholders.
- Used Tableau to identify key business opportunities and revamped target customer market by segmenting customers and analyzing customer base shift, leading to 49k (2.3% of total visits) potential visits.
- Used Python to conduct text analysis to discover the social sentiment of the customer service, enhancing customer relationship management.

Client: Mall of America

July 2019-Aug 2019

- Created an interactive dashboard in Tableau to visualize locations and time slots with high demand for calls and proposed changes to staffing, reducing 15% of call volume in 3 months.
- Identified unusual types of call through statistical tests using R and developed a staff deployment strategy for the management team.

EPISTEMIC ANALYTIC LAB, Madison, WI

Data Analyst

April 2018 - May 2019

- Innovated the collaborative learning outcome assessments using hierarchical linear regression and sequential pattern mining, leading to 24% increase in model performance metric.
- Developed functions using R to automate the process of creating simulated research data to resolve data availability issue.
- Processed and manipulated 40000+ records of quantified dialogue data.

DATA SCIENCE PROJECTS

Big Data Analytics: Built an end-to-end anomaly detection workflow specific to streaming data that achieved real time anomaly notification, incremental learning, and daily summary dashboard using AWS Sagemaker, AWS Kinesis streaming service, and AWS QuickSight.

Predictive Modeling and R Shiny App: Optimized client's daily trip schedule by forecasting trip duration using KNN algorithm and deployed the data product using R Shiny App.

SKILLS

- **Tools:** Tableau, Python, SQL, R, Hadoop, Spark, AWS
- **Techniques:** Predictive Modeling, Exploratory Data Analytics and Visualization, A/B Testing, Big Data Analytics, Time Series Forecasting, Marketing Analytics, Product Analytics