

# 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

LINKEDIN, Sunnyvale, CA

July 2020 - Present

**Geographic Data Specialist (Contract)**

- Conducting an exploratory analysis on 100m+ resume data using Spark to measure the potential improvement of member's geographic location coverage.
- Created Python and R programs to automate geographic entity review process, increasing efficiency by 70%.

MIS RESEARCH CENTER, University of Minnesota, Minneapolis, MN

May 2020-Present

**Volunteer Research Assistant**

- Developed a Tableau dashboard tracking sub-state level hospitalization data to measure impact of COVID-19 on national and local healthcare infrastructure.
- Designed an ETL pipeline using Python for a PostgreSQL database supporting hospitalization research.

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%.
- Discovered 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 to visualize locations and time slots with high demand for calls and proposed changes to staffing, reducing 14% 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.

## DATA SCIENCE PROJECTS

**Big Data Analytics:** Used AWS (Sagemaker, Kinesis, QuickSight) to build an end-to-end anomaly detection workflow specific to streaming data that achieved real time anomaly notification, incremental learning, and daily summary dashboard

**ETL Pipeline:** Used AWS Redshift and Apache Airflow to create a high-grade data pipeline that are dynamic, can be monitored, and allow easy backfills for the analytics team in a music-streaming company

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