

JINGJING (OLIVIA) LIANG

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EDUCATION

UNIVERSITY OF MINNESOTA, Minneapolis, MN

Candidate for **Master of Science in Business Analytics** (Carlson School of Management)

May 2020

MINZU UNIVERSITY OF CHINA, Beijing, China

Bachelor of Science (Honors) in Financial Management

June 2019

- Exchange student, University of Minnesota, Minneapolis (Fall 2017)

WORK EXPERIENCE

CARLSON ANALYTICS LAB, Minneapolis, MN

Data Science Student Consultant

July 2019 - Present

Client: Fortune 10 Healthcare Company (Deep Learning) – Ongoing Project

- Generate synthetic data that retains statistical similarity and model compatibility using GAN model in Python to make PII data sharing and analysis safer and more efficient.
- Facilitate the project as an engagement manager as well as design methodology for evaluating similarity using dimension reduction techniques such as Auto-encoder neural network, PCA, and t-SNE as well as KL-divergence measurement.

Client: Leading Hospitality and Entertainment Business (Unsupervised Learning)

- Evaluated the effectiveness of ~\$1.2B-worth coupons as well as segmented coupon and customer types respectively using clustering method in Python.
- Optimized coupon allocation for different customer segments using Association Rules and visualized results in Power BI.

Client: Mall of America (Exploratory Analytics)

- Created a dashboard transforming unstructured data into a compelling visual story using Tableau to report hourly hotspots in different locations at MOA
- Conducted exploratory analysis on 34K+ call logs in R to uncover calling patterns and factors affecting number of calls, and present insights to business stakeholders to facilitate decision making.

IQIYI, Beijing, China

Data Analyst Intern, User Growth Department

December 2018 - April 2019

- Collected and transformed data in MySQL and crafted periodic statistical reports on user behavior using Python and Power BI
- Performed data anomaly detection in R and Python with well understanding of the pipeline of media marketing channels
- Discovered strategic insights through user segmentation and retention analysis for product and marketing teams
- Managed data demands/projects and communicate analytical findings with various cross-functional stakeholders

DELOITTE, Beijing, China

Risk Analyst Intern

April 2018 - July 2018

- Identified cyber security compliance gap, combined multiple Excel files using SQL, and reduced manual effort by 50%
- Analyzed investing trends using CAPM models between Taiwan and Mainland China and performed data visualization in R
- Presented and communicated findings to project directors and cross-functional senior stakeholders

Industrial and Commercial Bank of China, Beijing, China

Financial Analyst Intern

June 2017 - August 2018

- Collected data in MySQL and evaluated personal banking data using ARIMA in python and Power BI for dashboard building.
- Evaluated portfolio allocation and performed portfolio optimization using Sharp Ratios and CAPM in python.

DATA SCIENCE PROJECTS

Time Series Forecasting: Conducted feature engineering and built LSTM Seq2Seq model and XGBoost on 296K+ training visit records to forecast the number of visitors on specific date for 150 Japanese Restaurants

Ads Click Prediction: Performed batch processing and Random Forest modeling with Spark SQL and MLlib on Amazon EMR to predict Ads click-through rate on 100 GB relational dataset, then built visualization dashboard using QuickSight.

Airline Customer Loyalty: Performed semi-supervised algorithm (constrained clustering) on 3.5M+ ticket-level data of an airline company with RFM Customer Value Evaluation model using R to segment customers for loyalty program.

SKILLS

Tools: Python, R, MySQL, Hadoop, Hive, Spark, Tableau, Power BI, AWS, MS Excel, Stata, SPSS

Techniques: Machine Learning, Data Warehousing, A/B Testing, Descriptive Analysis, Big Data Analysis, Data Visualization