### **EDUCATION**

University of Cincinnati, Carl H. Lindner College of Business, Cincinnati, Ohio

Master of Science in Business Analytics

The LNM Institute of Information Technology, Jaipur, India

Bachelor of Technology, Electronics and Communication

Expected August 2020 GPA: 3.96/4

# May 2014

#### **PROJECTS**

Mercari Price Challenge [Tech stack: Python, LGBM, scikit-learn]

- Developed price recommendation model for the sellers by using Gradient boosting (RMSE 0.411, Top 100 Kaggle Public leaderboard).
- Performed hyper parameter tuning using regressor techniques in LGBM library.
- Performed Topic modeling using LDA after pre-processing and converting to sparse matrices (using tf-idf).

### Bitcoin Price Prediction System [Tech stack: R, RShiny]

- Developed a Seasonal ARIMA model to forecast next quarter's prices of bitcoin.
- Performed EDA to get insights and differencing orders of the model.
- Created an application on RShiny.

## Movie Recommendation System [Tech stack: Python, scikit-learn]

- Developed collaborative filtering model using reviews (on the basis of ratings)
- Used Vector Space Modeling(Cosine Similarity) to find similar users.
- Performed matrix factorization using Low rank factorization
- Used Adam's optimization algorithm for minimizing the cost function.

### Reclaiming NYC Streets [Tech stack: Pyspark, Tableau]

- Built a fare prediction model for the New York city cabs (using xgboost)
- Analyzed prospective high demand zones (using Interactive visualizations in Tableau) to recommend ways for increasing taxi ridership.
- Aggregated large-scale data (~50 M rows) from multiple sources and delivered a presentation highlighting the analysis and results.

## SKILLS

- Analytical Packages: SQL, BigQuery ML, MS Excel, SPARK, PYSPARK, ARENA
- Software and Programming: Python, R, Tableau, SAS, Version Control(Git)

# **EXPERIENCE**

**AIG Analytics and Services,** Bangalore, India[Tech stack: R, SQL, Tableau]

July 2014 - October 2018

### Communication Model

- Identification of the most significant factors leading to customer adoption of a specified insurance product.
- "Conversion Time" windows were observed for various age groups using Tableau.
- Used ensemble of Logistic Regression and Decision tree model.

# Fraud Detection Model

- Identified fraudulent transaction patterns using Random Forest and KNN classification algorithm by training on historical data.
- Used dimension reduction techniques to extract features.
- Built Logistic Regression model reducing false positives for fraudulent transactions.
- Perform data analysis and create reports by using SQL queries.

# Retention Model

- Developed prediction models in R using random forest and gradient boosting to identify policies that would most likely cancel before the end of term, had 90 % True Positives.
- Performed Text mining on reviews given by customer to enable the management to know reasons for attrition.
- Analyzed customer behavioral patterns using Clustering and Decision Trees.

### Validation Model

Developed an automated validation code in SQL containing more than 150 sanity checks and was adopted by the team to be run on each new database created quarterly.

### **HONORS & ACTIVITIES**

- National Finalists: Hanes Analytics Case Competition
- Employee of the Quarter, consistent performer award EMEA and APAC, Multiple Spot awards
- Volunteer, Make a Wish Foundation
- Winner of Intramural Tennis League Singles, University of Cincinnati-2019