Jayant Raisinghani

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EDUCATION

The University of Texas at Austin	Master of Science, Business Analytics	**May 2020**
RCOEM, Nagpur, India	Bachelor of Engineering, Electronics and Communication	**May 2015**

WORK EXPERIENCE

Mu Sigma Business Solutions Pvt. Ltd. – Bangalore, India **Sep 2019 – Mar 2019**

ML Engagements:

- Workforce Management Planner for Fortune 100 Financial Services Firm:
  - Reduced 20% overtime costs by enabling Operations team to plan and staff workforce 8 weeks in advance as per demand
  - Developed a planning tool using forecasting and shrinkage techniques for cross resource allocation
  - **Techniques used:** R, SQL, Excel, Tableau, HTML, Datameer, ARIMA, Holt-Winters, Dynamic Regression
- Inventory Management using Predictive Analytics for Fortune 100 Pharmaceutical Firm:
  - Saved $6.5MM by determining products having high probability of stock out in coming 8 weeks across 90 markets
  - Collaborated with 20+ Global Supply Leaders to develop a predicting tool catering to their monthly logistics planning
  - **Techniques used:** SQL, Python, R, R Shiny, Excel, k-medoids clustering, RF Imputation, T-Bats, Fisher LDA, MARS, SVM, CSDT
- Demand Forecasting and Inventory Management for Multinational Retail Corporation:
  - Achieved 18% increment in sales of product categories by optimizing their quarterly assortment plans for stores in Chicago
  - Clustered stores in similar groups and optimized their product placement using demand forecast and shelf attributes
  - **Techniques used:** MySQL, Python, Excel, PowerBI, XGBoost, Linear Programming, k-means clustering

BI Engagements:

- Improving Digital Marketing for Fortune 100 Financial Services Firm:
  - Increased site enrollments by 10% by developing site performance reports and targeting customers using segmentation
  - Amplified the average conversion rate by 12% for IRA products by using A/B testing and Multivariate testing
  - **Techniques used:** R, Tableau, Hadoop, Adobe Analytics (clickstream data), K-means, Funnel Analysis
- Global Reporting Transformation for Fortune 100 Pharmaceutical Firm:
  - Developed an integrated data ecosystem and reporting structure for essential health business in AMEA and APAC region
  - Tailored datasets (>100MM rows) from multiple sources to create metrics, reports and statistics
  - **Techniques used:** DSS (Impala, HiveQL), Tableau, Redshift, Dropbox, S37
- Reporting Tower for a Fortune 100 Financial Services Firm:
  - Improved operational efficiency by 4% for US BFSI by building a framework consisting of Tableau reports providing a one stop shop to track all the operational metrics and R Shiny applications associated with associate performance tracking
  - **Techniques used:** SQL, Datameer, R/Rshiny, HTML, Tableau

ACADEMIC PROJECTS

- Loan Applications Forecasting (Aura Financial Services – Capstone Project; Austin, TX) **Jan 2020 – May 2020**
  - Improving the ROI by predicting the demand for loan applications and conversions in 38 locations of US region
  - Scraping external attributes like demographics, holidays etc. to incorporate with client's sales data for improving forecasts
  - **Techniques Used:** Excel, Tableau, Python, K-means, ARIMA, Selenium
- Crowd-Sourced Recommendation Engine for Beverages: Built a system to provide top 3 recommendations of beer products based on the attributes provided by the user using Spacy similarity and Vader sentiment analysis
- Notifier for Casualties Using Twitter Data: Identified real tweets associated with emergency situations using NLP, TF-IDF vectorization, SMOTE Sampling, Random Forest, SVM and PCA dimensionality reduction. Achieved 82% AUCROC
- Price Recommendation System for Airbnb Hosts: Used K-means imputation, Lasso regularization, SVM and XGBoost regression to predict optimum prices for rentals in Austin locality. Achieved 4.1 RMSE

- Developing Advertising Plans for Automobile Dealers: Segmented the car models using rule-based algorithms and identified key market advertising channels for each segment using marketing mix modeling. Achieved 0.92 R-Square (Adj)
- Casual Driving Risk Alert System (Kaggle top 12%): Used Sequential models and transfer learning (VGG16, ResNet, Xception) to determine driver activity. Achieved 92% accuracy and 0.24 log loss (http://bit.ly/casual_driving_risk_alert_system)
- Combined "Associated Press" and UNHCR data to create a report on migration patterns of refugees across the globe to US states (#IronViz: https://bit.ly/Migration_Trends_in_USA)

ADDITIONAL INFORMATION

- **Analytical Skills:** Statistical Analysis| Exploratory Data Analysis| Data Mining | Predictive Modelling | Sequential Models| CLTV | A/B Testing | Collaborative Filtering | Text Mining | Natural Language Processing| Optimization
- **Tools:** SQL (T-SQL, Impala, Hive, Spark) | Oracle OBIEE | MS Excel| SAS| Google Cloud Platform| Teradata| Redshift| ERP BI
- **Packages:** Python (keras, scikit-learn, pandas, numpy, seaborn, matplotlib, XGboost, Catboost) | R (caret, rpart, lpSolve, earth, teradataR, forecast)
- **Achievements:** Tableau SME for 5 different accounts at Mu Sigma Inc. | Leader of "Classroom Learning Program" initiative at Mu Sigma Inc. | Won 2 Spot Awards at Mu Sigma Inc. for agile project management, effective leadership and collaboration