### APOORVA JAIN

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**<u>SUMMARY:</u>** Looking to apply hands on experience utilizing predictive analytics and classical modeling techniques for statistical inference and create insights. Expert communicator with proven ability of working with cross-functional teams.

#### **EDUCATION:**

Southern Methodist University, Dallas, TexasAug 2020Masters in Engineering Management specializing in Information SystemGPA: 3.1Masters in Network EngineeringGPA: 4.0

Rajiv Gandhi Prodyogiki Vishwavidyalaya, Bhopal, India

Bachelors in Electrical and Electronics Engineering

June 2017

#### **SKILLS:**

**Competency Areas:** R, Python, SQL, Descriptive Analytics, Predictive Analytics, Inferential Analytics, Exploratory Analytics, Content Analytics, Neural Networks (CNN, RNN)

**ML Algorithms:** Cluster Analysis, Regression Analysis, Decision Tree, Random Forest, Naïve-bayes, Supported Vector Method, Time Series, A/B Testing, ETL

Data Science Tools: RStudio, Jupyter, Talend, Tensor Flow, Minitab, SPSS, Advanced MS Excel, MS Power BI, Tableau

 $\pmb{R:} \ dplyr, \ ggplot 2, \ caret, \ ROCR, \ lubridate, \ lattice, \ CaTools, \ text \ mining, \ tidy \ verse, \ mlr, \ e1071$ 

Python: NumPy, Pandas, Scikit Learn, Seaborn, Matplotlib, Keras

Databases: MySQL, Redshift, Microsoft SQL Server, Hive

#### **PROJECTS:**

### **COVID 19: Predictive Analysis(Power BI, Python)**

Feb. 20 – Apr. 20

- Validated 1.8 million datasets and predicted by supported vector method
- Created data visualizations such as geographical, tree and calendar map with confirmed cases, deaths and recovered cases of COVID-19 epidemic on Python

# **Netflix Movie: Recommender Engine(Python, R)**

Jan. 20 – Mar. 20

- Preprocessed 7.5 million data to develop content-based movie recommender system
- Optimized the number of clusters to reduce the heterogeneity till 15% using K-means method
- Suggested movies based on what the user liked and the rating of the movie and cross validated RMSE 0.8677

### Sentiment Analysis: Content analysis(R, SQL)

Dec. 19 – Jan. 20

- Developed different machine learning model on R to perform sentiment analysis and data categorization over the tweets of GOP debate that held in Ohio from SQLite database
- Evaluated the model performance using confusion matrix, ROC and AUC curve with an accuracy of 98.67% and 68.3%, determined and visualized the frequency of candidate that was mentioned the most and the sentiment of the tweet

# **Ilumexico: Model for Solar Plant Company (R, TABLEAU)**

**Apr. 19 – May. 19** 

- Performed data exploration using R, adjusted for missing values and anomalies, identified outliers
- Build machine learning models using Cluster Analysis (k-means:14) and Decision Tree to enhance payment portfolio of the product and determined good indicator for customer compliance to payment schedule "internal credit rating"
- Predicted most important features in determination of the classification variable, using Logistic Regression and evaluated the model performance using confusion matrix, ROC and AUC curve with an accuracy of 72%.

### **EXPERIENCE:**

## Altshuler Learning Enhancement Centre (SMU), Tutor, Dallas, USA

Sep. 19 - Current

- Provide academic assistance to the students for statistics and probability field to achieve better understanding practically and conceptually using different statistical tools
- Encourage critical thinking, develop communication and leadership skills

#### Disability and Success Strategies (SMU), Student Assistant, Dallas, USA

Aug. 18 - Current

- Created 100's of organized student reports for the administrative purpose using MS Excel and Box
- Handled the administrative work from enrolling students to providing solutions to their issue

# Vidushi Infotech, Analyst, Pune, India

Aug. 16 – Jul. 17

- Performed data wrangling and data aggregation using R, checked for missing values and identified anomalies in the data
- Modelled and automated reports of operations and marketing team to reduce the costs and increase the scalability
- Created 10 plus KPI dashboards on Power BI to report the cost-effective solutions