# **Bhavish Kumar**

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## **EDUCATION**

Syracuse University, School of Information Studies, Syracuse, NY

M.S. Applied Data Science

May 2021 GPA: 3.95

Relevant Coursework: Intro to Data Science, Data Analysis and Decision Making, Database Management, Big Data Analytics, Data Analytics, Business Analytics, Text Mining

# Cochin University of Science and Technology, Cochin, India

April 2016

Bachelor of Technology in Electronics and Communication Engineering

#### **EXPERIENCE**

Mu Sigma Business Solutions Pvt Ltd, Bangalore, India

May 2016 to June 2019

#### **Decision Scientist**

- Generated an annual 200% increase in the overall customer value proposition score of a fortune 10 eCommerce client by formulating a competitor analysis framework that helped gauge their performance against the market leader
- Estimated monthly scores using the formulated analytics framework that quantifies dimensions of online customer experience and uses PySpark & SQL on survey and Hadoop data sources for estimating scores of quantified metrics
- Visualized metric scores on a R shiny dashboard to help Chief Officers and 2500 managers to track monthly progress
- Collaborated with client to perform iterative Big Data exploration, regression & clustering analysis based on business understanding to improve accuracy of the estimated metric scores, thus opening the scope for framework automation
- Headed a team of 4 and used Data Marts. Data Pipelines with PySpark & SOL to automate the process of estimating metric scores which decreased the evaluation & dashboard refresh time by 27-man hours

#### **Trainee Decision Scientist**

- Collaborated with Human Resources team and gathered requirements to develop business process web applications with the help of a tool that uses .Net/C# on the server side, HTML/CSS for frontend and MS SQL for backend
- Aided HR team to carry out their business processes by developing candidate hiring & attendance tracker applications from end to end, starting from data modelling & database creation at the back end to UI design at the front end

# **ACADEMIC PROJECTS**

Will Car be a 'lemon'

April 2020 to May 2020

- Auto dealers who buy used cars at auto auctions face the risk of buying faulty cars ('lemons') which cannot be resold
- Implemented CRISP-DM methodology to develop ensemble learning classification models (GBM & Random Forest), using the 'caret' package (R), which will help the auto dealers accurately predict if a car is going to be a 'lemon'
- Evaluated the model performance and further fine-tuned the model to yield the best possible Accuracy & Recall
- Developed a web application (R Shiny Dashboard) containing insightful visualizations and a prediction module that uses machine learning models built using 'caret' package to make a prediction about the car based on the user inputs

# **Hospital Readmission Prediction**

April 2020 to May 2020

- Diabetes patients face the risk of getting readmitted to the hospital after discharge, due to ineffective hospital treatment
- Headed a team of 4 that used PySpark & developed Machine Learning models to help the hospital predict if a patient is going to get readmitted after discharge, based on which the hospital can alter their treatment to avoid readmission
- Performed Data Wrangling, Data Preprocessing and identified the most important features using the Principal Component Analysis technique, which was implemented using the 'pyspark.ml' library
- Developed and fine-tuned a classification model using 'Gradient Boosted Trees' algorithm which gave an 'AUC' of 69%

## **TECHNICAL SKILLS**

Languages: SQL, R (caret, ggplot2, keras, yardstick, tidyverse), Python(scikit-learn, pandas, numpy, matplotlib, seaborn, SciPy), R Shiny(shiny, arules, arulesViz, htmltools), PySpark(pyspark.sql, pyspark.ml, pyspark.mllib), C#, HTML/CSS

Techniques: EDA, Regression, Classification, Clustering, Deep Learning, Time Series Forecasting, Association Rules Mining Tools/Softwares: MS Excel (Vlookup, Pivot Tables, Analysis ToolPak, StatTools, Solver), Tableau, MS SOL Server, Teradata, Hadoop/Hive, Spark, Jupyter Notebooks, Anaconda, GIT, MS Visio, MS Access, Bizapp

Soft Skills: Documentation, Requirement Gathering, Presentation, Business Communication, Decision Making

#### **LEADERSHIP**

E-Board member (Tech Lead) of the Data Science Club at Syracuse University

May 2020 to May 2021

Organized a fund raiser for techno managerial symposium conducted by Model Engineering College

March 2015