AVANISH SINGH

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EXECUTIVE SUMMARY

- 3+ years of experience in **Data Science** & **Machine learning** solving client problems leveraging **deep learning** and **statistics**
- Excellent **data visualization** experienced either with proprietary code in **R** or **Python**, ready for insight digestion by business and decision making to senior management
- Specialized in deep learning using **NLP** to study customer sentiment and segmentation for targeted marketing
- Experienced in customer segmentation and propensity modeling including predicting credit risk and fraud mitigation
- Experienced in implementing **SVM, Naïve Bayes, Logistic Regression, Decision trees, Random Forests, Bagging & Boosting**
- Developed internal tools for **text mining** (sentimental analysis), and web crawler for collecting data by **Python** and SQL

EDUCATION

Master's in Business Analytics **May 2023**
University of Illinois, Chicago, USA

Post Graduate Diploma in Applied Statistics 2019
Indira Gandhi National Open University, India

Bachelor of Technology with specialization in Electrical & Electronics 2011
Uttar Pradesh Technical University, India

TECHNICAL SKILLS AND CERTIFICATION

- **Database/Data Visualization:** MS SQL, MS Access, Tableau, Power BI, Azure, AWS
- **Data Analytics: Python**, R, Alteryx, Google Analytics, Advanced Excel (Statistical Analysis pack, VLOOKUP, Pivot Table), Databricks
- **Analytics:** Design of experiments (Hypothesis testing, ANOVA), A/B testing, Regression Analysis, Clustering/Segmentation, Decision tree, Random Forest, Logistic Regression, SVM, Naïve Bayes, KNN, K-Means, **Text Analytics, Gradient Descent**, **Natural Language processing**

PROFESSIONAL EXPERIENCE

JK Tyres – Senior Data Analyst **Oct' 19– May'21**
India

- Led customer personalization efforts through segmentation using **HClust, K-Mean** clustering for targeted marketing and pricing strategy
- Led the design of experiments (**hypothesis testing, T-test, F test, ANOVA**), also measured campaign effectiveness and drivers impacting sales
- Worked on development and training of ensemble models for a hybrid recommendation engine using TFIDF, OKAPI BM25 on using **Python** for personalized food recommendations which increased customer retention by 15%
- Developed credit risk model for a wholesale retailer by implementing clustering and decision tree models and presented the analytics dashboard using **Tableau**
- Extracted, cleaned, and merged data from different datasets and transformed data using **Python** to get sales insights for product management and sales team
- Collaborated with cross-functional teams and prepared dashboards to measure key sales KPIs using **Tableau/Power BI** and presented to senior management to drive decision making and analytics adaption across the organization

JK Tyres – Data Analyst **Nov'15 – Oct'17**

- Worked with **Python** Libraries – NumPy and Pandas to read data from multiple sources and transform them to project requirements.
- Worked on data gathering and development of lakehouse architecture to create a single source for data analytics using Azure services
- Developed P&L dashboards for YOY growth, identification of top markets across different products using geolocation data, and advanced Tableau features (Lod's, Actions, and Parameters)

ACADEMIC PROJECTS

ML Project: Sentiment analysis using Yelp reviews to improve restaurant menu and service in R

- Performed data cleaning to eliminate outliers and various missing values from various attributes using R
- Calculated the number of reviews by star-rating, tokenized the text of the review, removed the stop words and the words which are less likely to occur in review by using R library like tidytext, SnowballC, textstem
- Used Stemming and Lemmatization to calculate **If**, **Idf** which help in sentiment analysis using the dictionaries
- Performed the sentiment analysis using python **NLP** dictionaries (**NRC, Bing, AFINN**) by analyzing users' reviews and the star rating of restaurants from Yelp for restaurants to understand the poor performing menus or service

ML Project: Directing Customers to Subscription through Financial App Behavior Analysis in Python

- Worked with Python Data Science Libraries – **NumPy** and **Pandas** to read data from multiple sources and performed transformation as per project requirements, feature engineered new attributes based on domain expertise
- Created various models like Random Forest, SVM, Logistic Regression, evaluated the model based on Confusion matrix for selecting best performing model to predict new customers who are interested to buy the product or not