**SHAIVYA BAJPAI**

shaivyabajpai@gmail.com| (682) 551-0897 | http://www.linkedin.com/in/shaivyabajpai/

Data analysis experience of 4+ years to help utilizing custom made database techniques to simplify and resolve business problems through high analytical and process-oriented Business Intelligence operations.

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| • | Data Model & Relational Database implementation | •Business Intelligence & Forecasting Reports |
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**EDUCATION**

*Arlington, TX* Aug *‘17 – May ‘20*

**UNIVERSITY OF TEXAS**

*MS in Business Analytics, (Specialization in Machine Learning, Data Mining & Business Statistics)*

*MS in Marketing Research, (Specialization on Market Analytics & Customer Insights)*

*Gr. Noida, India*

*Aug ’08 – May ‘12*

**UTTAR PRADESH TECHNICAL UNIVERSITY**

*B.Tech in Mechanical Engineering, Minor in Operations Research*

**PROFESSIONAL EXPERIENCE**

Business Intelligence Analyst*,* **Prime Rays Inc (Microsoft), Seattle** *May ‘20 – Present*

* Collaborated with business management and staff to deliver technical solutions that meet customer needs. Work effectively with customers in all phases of application development projects, potentially including requirements gathering, design, testing and change management
* Participated in making performance matrix reports to showcase group measures based on different attributes.

Strategic Insights Intern*,* **Alcon Labs, Texas** *May ‘18 – Aug’18*

* Designed questionnaires to measure customer satisfaction score and build strategic business plans for improved customer engagement
* Collaborated with the ETL team and refined algorithms to alleviate bottlenecks in creating dashboards, utilized for publishing quarterly reports
* Developed strategies to improve current business plans and collaborated with Finance Department to improvise research plans that helped increase efficiency by 18%
* Collaborated with the HR team and conducted qualitative research to identify the high attrition rate of employees from R&D department.
* Collaborated with Marketing team to help them identify marketing of eye surgeons’ services for cataract.

Data Analyst, Business Intelligence Team, **Ernst & Young, India** *Dec ‘15 – Aug ‘17*

* Helped Alfa Insurance in the United States in identifying gaps in their existing Guidewire Product (records data for home, auto and life insurers) and coded complex queries to build an effective framework for their integration, conversion and claim center teams
* Successfully detected 90% fraudulent transactions in insurance policies by designing a DataMart for the company’s insurance database
* Extracted data from an array for repositories like Flat Files, Relational Databases (Oracle, SQL Server) and utilized ETL reporting tools to create

data reports for improved visualization and analysis

* Created logical data models and led the project for data migration to Informatica through mainframes for Farmers Insurance in the United States
* Improvised databases in Python for cleaning, normalizing, and storing on localhost and engaged in testing frameworks to measure the divergence in prototyped and production codes for sequential algorithm pipeline
* Implemented an analytical framework to automate regression testing status reports and coordinated with the acquisition team to extract and compile legacy data

Systems Engineer**, Tata Consultancy Services, India** *Dec ‘12 – Dec ‘15*

* Collaborated with the Reinsurance team to develop a Datawarehouse for tracking customers affected by floods and earthquakes in London. This involved creation of PL/SQL stored procedures and their call from the Informatica power center
* Demonstrated ability to logically analyze business requirements by translating functional/high level designs and helped the client retain a 2 million dataset by successfully leading data migration from mainframes to Teradata environment

**TECHNICAL SKILLS**

*Programming*: Python ( NLTK, Geospatial Analytics, Sales Forecasting), MySQL, R Studio, MATLAB, Azure, SPSS

*Software*: Spark-SQL, Tableau, ETL-Informatica, SAS Studio, Teradata, Power BI, Basics AWS, Informatica

*Data Analysis*:Clustering, Bayesian inference, pattern recognition, classification, optimization, Recommender System

**ACADEMIC PROJECTS**

* *NY Stock prediction (Financial Forecasting):* Forecasting done using ARIMA & SARIMA models. Conducted a data regression analysis of the relationship between the sales and the trends, achieved 50% accurate predictions of performance when compared with initial sales.
* *Language modeling:* Analyzed tweets (Yelp Reviews) from tweeter to get the top used words, check maximum length, worst comments and best comments and displayed locations from it by using various python libraries. Classified legal cases in judicial department categories using TFIDF, chi square, Linear SVC, SGD etc. to get 82 % F Score after tweaking parameters and cases with stratified cross validation. Made classifier robust to rare categories (one or two cases). Finally classified the unlabeled documents using an ensemble scheme from above classifiers and rules.
* *Predictive Modelling-Data Mining Project*: Establish a proper model for identifying from the dataset if the consumers will be buying policies from the bank in future. Improve the customer buying tendencies, minimizing the customer dissatisfaction tracked through data analysis, by 20%.
* *Recommender System (Spotify API, Analytics):* Developing a recommender system based on popularity of any given playlist (or collection of tracks) based on metadata & audio features from the Spotify API.
* *NBA vs FIFA (Research Design):* Identified the main reason behind the dying audience for NBA through qualitative research and conducting multiple focus groups.
* *Sales Prediction using spatial analytics & recommender system:* This was achieved by applying several SVD’s to determine different customer

Demographics*.*

* *Financial Forecasting: Determining models through predictive analytics to check for trends and seasonality in time series analytics. Using ARIMA and SARIMA techniques to determine the effectiveness of models.*
* *Airbnb Analytics Project: Data analytics project to help customers pick a good neighborhood area for residing during a vacation period which would be affordable. This was based on big data platform to help analyze data collected through various data sources and then building models with 91% accuracy to give desired results.*
* *Multivariate Data Analytics Projects: This was done to identify the reduction in the readers rate of University Publication. It was done through conducting data, statistical and behavioral analysis. Multiple Focus group and one-on-one interviews were conducted. Based on the issues addressed during this qualitative research a survey was conducted to analyze the larger impact and to gather customer feedbacks. Logistic regression was implemented to build a model to check if customers would read the newsletter in future if the changes gauged through the survey were implemented.*