Akshay Bhasme

Email: akshaybhasme30@gmail.com   **Mobile No:** +91 7972014093
GitHub: https://github.com/Akshay-Bhasme   **LinkedIn:** www.linkedin.com/in/akshaybhasme30
Medium: https://medium.com/@akshaybhasme30

PROFESSIONAL SUMMARY

Passionate Data Scientist and Machine Learning Engineer with 4+ years of experience in Data Science/ML and analytics domain, strong coding abilities, having hands on experience in Machine Learning Algorithms, Time Series, Regression analysis and Classification Models along with mathematics, statistics and strong analytical skills required to solve the real-world business problems.

PROFESSIONAL EXPERIENCE

Data Scientist – Mindshare Media, Bangalore.   Aug 2022–Present

Project – Marketing Mix Model
- **Objective: Build a regression model on the advertising spends data for optimizing spends on media channels and analyze the impact of macroeconomic and other factors on the sales.**
- Performed the data acquisition from GCP and client database, data preprocessing, data validation and analysis.
- Applied geometric adstock transformation on the media variables to introduce the advertising properties (e.g., decay, lag-lead) and non-linearity into the model. Used Facebook Prophet library to extract monthly trends.
- Built nested regression model to encounter issue of collinearity. Predicted store sales with 0.93 R2 score.
- Performed decomposition of the variables to understand the incremental effects of each media spends and external variables on sales, visualized using waterfall chart.
- Automated adstock hyperparameter tuning and deployed MMM nested model on local machine using streamlit.
- Libraries/Software used: scikit-learn, Meta Robyn, Facebook Prophet, LightweightMMM.

Project – Customer Lifetime Value prediction (CLTV) – Customer Segmentation
- **Objective: Predict the customer lifetime value of the customers to optimize the marketing efforts.**
- Performed feature engineering to extract features like recency, frequency and monetary value (RFM), and assigned scores using Kmeans clustering based on the RFM values.
- Calculated Customer Lifetime Value and trained an XGBoost classifier to predict the valued customers.
- Achieved 0.73 Recall, 0.89 Precision and 0.80 F1 score for prediction of high valued customers.

Data Scientist (ML) - Enrichepro Software Pvt. Ltd. Pune   Nov 2020 – Aug 2022

Project: Job title prediction (Classification problem)
- Given the features like Job description, domain info, job level, country and other relevant features, performed NLP and feature engineering to use the text data information in predicting job title.
- Build and compared Logistic regression and tree-based ensemble models, selected XGBoost model which gave strong probability values for class labels.
- Delivered a retrainable ML model with client presentation and the results of test queries.

Project: Resume parsing and Job description matching algorithm to filter the candidates based on matching score.
- Developed a modular Python code for parsing the uploaded resume to extract Name, email, mobile numbers, skills, experience and education details.
- Built an algorithm that will return a matching score given the job description and the candidate resume.
- Successfully deployed a multi-objective (parsing, matching score calculating and filtering) algorithm using Streamlit.

Data Scientist (CSM) – ICICI Lombard GIC, Mumbai   Jan 2020 - Nov 2020

Project: Fraud claims prediction and integration of the flagging system in the software.
- **Objective: Classification of the fraudulent claims and flagging them in the initial stages of claim process.**
- Developed understanding of business problem and contributed in designing project stages.
- Performed Data acquisition, preprocessing, EDA and feature engineering to derive new features from existing.
- Extracted the data using SQL and preprocessed the big data using parallel computing systems like Dask.
- Trained Logistic regression as base model and finalized Random Forest after comparing other models.
- Generalized the model to make it production ready and tested it against the test queries.

Project: Segmentation of low, medium and high liability claims using clustering.
- **Objective: Segmenting the claims in low, medium and high liability claims to maintain equal workloads amongst surveyors as well as assigning high liability claims to external surveyors.**
- Developed understanding of business problem and performed data acquisition, data preprocessing and EDA.
- Used domain knowledge and feature engineering techniques to derive the new features from existing.
- Used K-means clustering to cluster the claims in low, medium and high liability claims.
- Developed a rule-based system with the help of IT team to maintain the workload within surveyors.

Data Analyst (Executive) **- HDFC Ergo GIC, Mumbai**   **Aug 2018 - Dec 2019**

Project: Fraud claims prediction and trigger app notification alert.
- **Objective: Classification of the fraudulent claims and integrating it with app that will send notification alert.**
- Developed understanding of business problem and contributed in designing project stages.
- Performed Data acquisition, preprocessing, EDA and feature engineering to derive new features from existing.
- Handled important tasks like getting labeled data and balancing the class imbalance in the data.
- Trained the Random Forest, a generalized model that returned strong probability values than any other model.
- Performed testing on actual claims data and retrained the model after post analysis.
- Maintained documentations and delivered project presentation to communicate the results.

SKILLS AND COMPETENCIES
- **Language:** Python, SQL, R
- **Technical:** Machine Learning, Artificial Intelligence, Data Science, Data Mining, Deep Learning, CNN, RNN, LSTM, Natural Language Processing, NLP, Linear Models, KNN, SVM, Naive Bayes, Random Forest, GBDT, Clustering, K-Means, statsmodels, pandas profiling.
- **Tools:** TensorFlow, Keras, Scikit-Learn, NLTK, XGBOOST, Pandas, NumPy, Seaborn, Matplotlib, GCP VM Instances, GCP Notebook, Docker, Containers, Flask, GIT.

ACHIEVEMENTS
- Received 'Newbie in the Spotlight' award recognition in GroupM Choreos annual awards.

EDUCATION
- ***B. Tech in Automobile Engineering (Year 2018)   7.99 CGPA***
  Institute: - Rajarambapu Institute of Technology (RIT), Sangli.