# Kumar Rajmani Bapat

Boston MA • (857) 200-6102 • bapat.k@northeastern.edu • linkedin.com/in/kumar-rajmani-bapat/• GitHub

## **Education**

Northeastern University

Boston, MA

#### Master of Science, Data Analytics Engineering

**Expected Dec 2024** 

 Relevant Courses: Data Analytics, Data Management, Computation and Visualization, Data Mining in Engineering, Product Development for Engineers

Medi-Caps University Indore, IN

## Bachelor of Technology, Computer Science Engineering (Specialization: Data Science) May 2022

 Relevant Courses: Software Engineering, Data Science, Machine Learning, SQL, Natural Language Processing, NoSQL, Design Structure & Algorithms, Artificial Intelligence, Real Time Data Processing, Statistics Inference

## **Technical Skills and Certifications**

Analytics Skills: Python, Tableau, SQL, Excel, Google Analytics, Power BI, SAP, SAS, MATLAB, SPSS, Apache Spark Programming: Python, Java, SQL, JavaScript, C++, PySpark, R, Gremlin, Cypher, C, GCP, Git, Linux, UNIX Machine Learning libraries: Pandas, NumPy, Matplotlib, Seaborn, TensorFlow, OpenCV, Scikit-Learn Databases: MySQL, MongoDB, SSMS (SQL Server), PostgreSQL, Snowflake, Oracle, AWS Neptune, Neo4J Certifications: Python- Google, data analysis -LinkedIn, Azure Data- Microsoft, Career Edge -TCS, Microsoft Office

## **Professional Experience**

## Graduate Teaching Assistant (Data Analytics) - Northeastern University, Boston Sep 2023 - Dec 2023

- Elevated student assignment scores by 30%, demonstrating high levels of concept mastery and practical data science proficiency through targeted office hours and interactive code walks
- Conducted sentiment analysis on student data, tailoring teaching methodologies to optimize learning experiences and drive improved academic results

## Research Data Scientist Intern – India Metrological Department, Bhopal (IN) Dec 2020 - Nov 2021

- Developed a high-precision AI-driven crop disease detection model using CNN and image processing techniques, providing farmers with actionable data insights that led to a significant 15% reduction in crop losses
- Evaluated machine learning models on dataset of over 85,000 images using image reduction, feature engineering, and data automation techniques, resulting in a 60% reduction in workload
- Optimized the performance of machine learning model by strategically applying PCA, KNN, and the Decision Tree algorithm, resulting in a 70% increase in accuracy of model

#### Data Science Intern – Indian Institute of Technology, Kanpur (IN)

Jun 2019 - Aug 2019

- Revamped customer churn prediction at Courses by implementing a Python-based predictive model, resulting in a 18% accuracy boost existing models, facilitating proactive customer retention strategies
- Strategically utilized Tableau, Python, and Google Analytics for report generation, enabling data-driven decision making and effective data visualization, culminating in a 30% boost in user experience
- Architected a Machine Learning algorithm for audience segmentation and recommended relevant education courses based on user behaviors, resulting in a 20% increase in enrollments
- Conducted thorough analyses of email, push, SMS, OTT, CTV, and other marketing campaigns to identify key performance factors, resulting in a 9% improvement in conversion rates, and a 10% increase in ROI

#### **Projects**

## **Credit Card Users Churn Prediction**

Aug 2023- Sep 2023

- Formulated a Logistic Regression model for predicting credit card churn, achieving an impressive accuracy of 88%
- Enhanced model performance through rigorous data preparation and feature selection, unveiling key churn-related features and leading to a significant 10% improvement in model accuracy

## Cardio-Viz: Interactive Heart Disease Analysis & Prediction

May 2023 -Jun 2023

- Implemented a Tableau-based predictive model for heart disease risk classification, achieving accuracy rate of 90%
- Utilized the insights from the predictive model to design targeted health interventions, contributing to a potential decrease in heart disease incidence among the high-risk population

#### Stock market Time Series analysis With ARIMA

Mar 2023-May 2023

- Analyzed top 500 stock market data using ARIMA, identifying trends and patterns for informed investment decisions
- Leveraged ARIMA insights and generated a remarkable 12% profit, validating its effectiveness in real-world trading

# **EDA: Twitter Sentiment Analysis Using NN**

Jan 2023- Mar 2023

- Developed an Artificial neural network utilizing TensorFlow and NLP techniques to classify the sentiment of tweets
- Evaluated the model on the 140 Sentiment dataset of 1.6 million tweets, achieving an accuracy of 74%, demonstrating its ability to effectively analyze real-world Twitter data

## **B2B** Ecommerce Website with AI Chatbot

Feb 2022 - Aug 2022

- Engineered a secure B2B ecommerce platform in Django, seamlessly integrating a Flask AI chatbot and boosted user engagement by 20% through real-time guidance and personalized product recommendations
- Achieved a 15% improvement in conversion rates by delivering a streamlined online shopping experience, implementing robust security measures, intuitive navigation, and incorporating user feedback processes