

**WORK EXPERIENCE**

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**Deloitte Consulting, Data Analyst***June 2019 – Jan 2022, Bangalore*

- Identified banking customers at risk of churn during the lockdown using a Logistic regression model. Carried out in-depth analysis using Tableau dashboards paired with model findings to understand demographics likely causing the churn. Achieved an accuracy of 75% and recall of 78%. Communicated insights to clients and helped them reduce churn in the following quarter by 43%. (python, scikit-learn, Tableau, Jupyter)
- Automated boat detection in a private harbor using NNU-Net for image segmentation and OpenCV for image differencing on segmented masks. Procured high-res GEOTIFF satellite image using LandViewer API. Cleaned, dehazed the images to remove fog. Extracted geo-location of boats using geotiff. Hosted and scheduled end to end process on AWS to be executed hourly. Reduced 30 hours of work per week to less than 3 hours by eliminating the need for manual tracking (python, pytorch, AWS, Geotiff, GIS, OpenCV, EC2, Sagemaker, Lambda, Jupyter)
- Segmented restaurant chain customers using K means clustering, conducting RFM analysis on transaction records and the cluster centroids. Analyzed customer feedback on dining preferences and lockdown caution using Tableau dashboards and correlated the observed patterns with cluster data. Presented clients with actionable insights for developing targeted marketing strategies tailored to each customer segment (python, scikit-learn, Tableau, Jupyter, MS Powerpoint)
- Processed medical records with AWS Glue and applied AWS Comprehend for Named Entity Recognition, enabled more efficient record query speed and medical case segmentation. (AWS EC2, Sagemaker, Comprehend, MS Excel)

**MAQ Software, Database Management Summer Intern***May 2018 – July 2018, Hyderabad*

- Created and implemented an ETL pipeline in SQL Server Management Studio and SSIS for cleaning, structuring, and consolidating three Data Marts into one. Also wrote triggers in place and stored procedures to identify and resolve errors and inconsistencies in tables while transferring.

**COLLEGE PROJECTS**

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<https://github.com/ganeshraj-k>**Chatbot model with a personality:**

- Developed a conversational model mimicking Chandler Bing's dialogue style from "Friends" using a seq2seq model with LSTM.
- Concurrently, fine-tuned Google's T5-small model on the same dataset for benchmarking and comparison purposes.

**Music Sentiment Analysis:**

- Performed sentiment analysis with R on four artists' albums to identify key emotions in their music, to get a deeper understanding of their style.
- Also used metadata from the songs to create charts depicting danceability, valence, tempo, and major key notes for each album. Extracted lyrics for each song using GeniusR and Spotify APIs.

**S&P 500 Time Series Analysis:**

- Generated visualizations in R to analyze sector-by-sector trends of the S&P 500 during 2019-2020. Also graphically visualized weekly and monthly closing trends, along with inter-sector comparisons.
- Applied an auto ARIMA model for deeper seasonal analysis and future index value forecasting.

**Twitter Search:**

- Created a web application to search tweets, users, and hashtags in a tweet database. Hosted tweets on MongoDB for rapid querying and user profiles on PostgreSQL.
- Integrated synonym and minimum edit distance search methods. Utilized Flask for API requests and web app management.

**College Leave Application:**

- Developed a Web Application using RESTful API that had features to submit, track, approve applications.

**EDUCATION**

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**Rutgers University New Brunswick (GPA – 3.75)***Aug 2022 – current, New Brunswick**MS, Data Science***Indian Institute of Technology Indore (GPA – 3.25)***June 2015 – May 2019, Indore**B. Tech, Computer Science***SKILLS**

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Python, R, Torch, TensorFlow, scikit-learn, Jupyter | SQL, MongoDB, no-SQL | matplotlib, Tableau, Excel | Github, AWS, Glue | MS powerpoint, Excel

**CERTIFICATIONS AND OTHER**

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- Certified AWS Machine Learning Specialist and Cloud Practitioner
- Ranked in the top 5 among 3000 teams in the Travelers Insurance University Modeling Contest on Kaggle.
- Led AVANA, the campus social welfare club at IIT Indore, spearheading initiatives such as cleanliness drives, weekend teaching workshops for underprivileged children, and blood donation drives.