ARPAN KORAT

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EDUCATION

University At Buffalo, State University Of New York – Buffalo **Sept 2021-Present**
MS – Engineering Science – Data Science **GPA**: 3.92/4.0
Courses: Probability, Numerical Mathematic (Advance Linear Algebra), Data Driven Analyses, Statistical Mining

Gujarat Technological University (GTU), Ahmedabad, India **Aug 2016-Aug 2020**
Bachelor of Engineering – Information Technology **CGPA**: 9.25/10.00
Courses: Big Data Analytics, AI, Data Mining and Business Intelligence, Data Compression and Data Retrieval, Numerical and Statistical Method for CS, Database Management Systems, Python Programming, Software Engineering

TECHNICAL SKILLS

OS:	Unix/Linux, Windows, MacOS
Prog Lang.:	Python (Pandas, Matplotlib, Seaborn), R, Java, C++, SQL, MATLAB, JavaScript, CSS, C#
Frameworks:	Flask, Bootstrap, ML (sklearn, TensorFlow, PyTorch, Keras, PySpark, MLflow, MLlib), Sparks, R-Shiny
Database:	MySQL, Oracle PL/SQL, RDBMS, NoSQL, PostgreSQL, Google BigQuery, HIVE, MapReduce
Tools:	GitHub, PyCharm, PowerBI, Tableau, SQLite Studio, Google Data Studio, MS office
Other:	Probability, NLP, Statistics, Data Visualization, Big Data, PCA, Hypothesis Testing, ML Optimization

WORK EXPERIENCE

Data Scientist and Business Analyst (Intern), The Spark Foundation **Apr 2021-May 2021**
- Perform exploratory data analysis (EDA) on various domains (Sports, Retail) using Python and Tableau.
- Created storyboards and dashboards for various tasks such as spread of Covid-19 cases worldwide using timeline analysis.

Data Analyst (Intern), Adis Technologies **Jun 2020-Nov 2020**
- Worked on Microsoft SQL Server using T-SQL.
- Generated the performance matrix for the companies' production units.
- Check for the loopholes in the database: Redundancy of the data, outlier detection, etc. Make database system 8% more robust than the existing database.

ENGINEERING PROJECTS

Automobile Loan Default Prediction [Link] | *Python, SQLite, Seaborn, Sklearn, Google-Colab, PCA* **Oct 2021-Dec 2021**
- Project aims to predict if the car loan borrower will repay the loan to the lender or not. (Domain - Finance)
- Normalized the raw data to 3-NF and built data pipeline using SQL. Used Seaborn library for EDA.
- Implemented a SMOTE analysis on data to balance the classes. Deployed ML models such as L1 L2 regularization.
- Performed Hyperparameter Tuning and optimization on model and increased the accuracy rate from 90% to 94.82%.

Prediction of Term Deposit Enrollment [Link] | *EDA, Python, Pandas, R, Statistical Analyses, ETL* **Oct 2021-Dec 2021**
- Aim is to enhance efficiency of marketing campaigns, organized by banks that sell Term Deposit subscriptions as product. (Domain - Finance)
- Analyzed large retail bank data. Performed Statistical concepts and generate statistical graphs to detect the abnormalities.
- Implemented various regression analysis and classification ML algorithms such as XGBoost, Random Forest, SVM, Logistic Regression, ANN, Bagging, gradient Boosting, to predict the potential term deposit holders. Accuracy – 87%.
- Reduced the false detection of potential term deposit holder by 7%. Translated results into business recommendations.

Objects' movement detection for Robot [Link] | *MATLAB, Applied Probability* **Nov 2021-Dec 2021**
- Developed probabilistic algorithm to simulate the object and robot movements in the horizon. (Domain – Research)
- Calculated the expected time to catch the object via robot. Detected 3 type of object robot interaction.
- Designed MATLAB simulations to dynamically detect the object movement and robot will act accordingly.

LEADERSHIP & ACHIEVEMENTS

- Won 3rd prize in 'App Inventors Challenge' in National level competition, sponsored by IEEE. (Technical Event)
- I was a Student Coordinator and Event Head in state level technical as well as in sports events during 2018, 2019.
- Team leader in project group during 2017, 2018, 2019.