BHARATH PURUSHOTHAMAN
Indian Institute of Technology Kanpur

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Academic Qualifications

Program	Institution/Board	%/CGPA	Year
M.Tech. (Aerospace Engineering)	Indian Institute of Technology Kanpur	**8.9/10**	2021-present
B.E. (Aeronautical Engineering)	Madras Institute of Technology, Anna University	**9.28/10**	2016-20
Class XII	Don Bosco Mat. Hr. Sec. School-Egmore	**97.25%**	2016
Class X	Don Bosco Mat. Hr. Sec. School-Egmore	**99%**	2014

Key Projects

1. SpaceX Falcon 9 first stage Landing Prediction *
(*IBM Data Science Capstone Project*)   **Online*

- **Objective:** To train a Machine Learning model to predict successful Stage 1 recovery.
- **Approach:** Collected Data from Public SpaceX API and web scraped from Wikipedia.Explored data using SQL, visualization, folium maps, and dashboards. Used Four machine learning models and visualized their accuracy scores.
- **Impact:** Achieved **87.32%** accuracy with the Decision Tree Model. The other three Classification models(KNN, SVM, and Logistic Regression) had less accuracy when compared with the former.

2. Formulating Business Strategy for Cyclistic Bikesharing Company *
(*Google Data Analytics Capstone Project*)

- **Objective:** To increase profitability by converting casual riders to annual members via a targeted marketing campaign.
- **Approach:** Collected Cyclistic historical bike trip data to identify trends in the usage of bikes. Initially analyzed the data using a spreadsheet, then used R packages for data cleaning and analysis. Also created Dashboards using Tableau.
- **Impact:** Found the busiest casual riders' day/month/weeks and suggested that promotions must be done at those specific timelines. The price could be decreased during the work hour to boost casual ridership.

3. Predicting Credit Card Fraud with R *
(*Coursera Project Network*)

- **Objective:** To identify fraudulent credit card transactions with a variety of classification methods.
- **Approach:**Explored data, trained, and evaluated decision tree, naïve Bayes, and Linear discriminant analysis classification models using R. Generated synthetic samples to improve the performance of the models.

Professional Certifications

- **IBM Data Science Professional Certificate**
  - Honed hands-on skills in Data Science and Machine Learning.Became familiar with using a variety of data science tools, learned Python and SQL, performed Data Visualization and Analysis, and created Machine Learning models.
- **Google Data Analytics Professional Certificate**
  - Hands-on skills in cleaning and organizing data for analysis, completing analysis and calculations using spreadsheets, SQL, and R programming and then visualizing and presenting data findings in dashboards using Tableau.

Relevant Courses

1. Probability and Statistics for Business and Data Science*
2. Python for Everybody Specialization: Getting Started with Python and Python Data Structures(2 courses)*
3. Data Structures and Algorithms (U.G.elective)

Technical Skills

- **Programming Language:** C, C++, Python, R, MATLAB
- **Databases:** BigQuery,IBMDB2,MySql
- **Web Technology:** HTML, CSS, Javascript
- **Tools:** Tableau, Rstudio, JupyterNotebook

Scholastic Achievements

- Giri Brothers Award for the **Best Project** and secured **2nd rank** in the department in Bachelor's Programme.
- Secured All India Rank 113 in GATE 2021.
- Consecutively awarded **General Proficiency** in Classes X, XI, and XII.
- Fr. Gatti Gold Medal for securing **rank 1** in Class X and Past Pupils Association Award to the **best student** in Academics.
- Mr.Strong's Galada **Rolling Trophy for overall performance** in Academics from Class VI to X.

Positions of Responsibility

- **General Representative of Department(U.G)**-Organized skill-based Composites Workshops during Symposium. Conducted yearly inauguration and farewells for incoming and outgoing students. Organized alumni meet every year.