# PARITA BRAHMBHATT

## **EDUCATION**

#### Master of Science in Computer Science.

Dec 2023

Clemson University, South Carolina, USA

GPA 3.46/4.00

- Specialization in AI and ML
- International Services Student Coordinator

#### PROFESSIONAL EXPERIENCE

#### CLEMSON UNIVERSITY, Clemson, SC, USA

Research Lab Specialist (Department of Environmental Engineering & Earth Sciences)

Nov 24 - Present

- Built 10 predictive models to forecast methane production using data of Southern wastewater treatment plant, Greenville.
- Utilized advanced feature engineering techniques. Implemented ensemble machine learning algorithm with Python by selecting top 3 performing ML and deep learning algorithms.
- Currently, focused on optimizing model accuracy through latest research methodologies.

Graduate Student Assistant (Office of Global Engagement)

Feb 22 – Dec 23

- Administered a database in SQL environment for 15K+ international students with a data accuracy of 95%.
- Led the development of an interactive web-based dashboard using Tableau Server and Python with the past 10 years of data.
- Trained and mentored three new hires for future data analysis and IT projects.
- Coordinated with IT services and performed ANOVA test with R programming, resulting in reduced queries by 85%.

#### SIGMA MECHOTRONICS INC. LTD., Ahmedabad, India

Junior Data Scientist Sep 20 – Dec 21

- Forged a new key performance indicator (KPI), resulting in 30% improved operational efficiency.
- Feature Engineering, Data Preparation, Statistical Analysis.

Intern - Data Analytics

Jan 20 – Sep 20

• Utilized statistical methods, machine learning, and visualization tools to interpret data trends, contributing to informed decision-making processes.

#### **ACADEMIC PROJECTS**

#### Admissions Data Analysis (Link) | Remote

Feb 24

- Developed a Tableau tool to analyze admissions key performance indices such as yield rate, admissions rate, etc.
- Implemented diverse filters to enable users to interact with charts and comprehend admissions trends over past three years.

#### IT Cost Analysis with PowerBI (Link) | Remote

Aug 23 – Sep 23

- Built Power BI dashboards to automate the cost analysis within the IT department.
- Developed KPI, diverse budget and forecast graphs, and insightful tables for affected sectors and countries.

## Prediction of Survival Rate for Titanic (Link) | Remote

Apr 23 – May 23

- Performed feature engineering and EDA for modeling. Found 5 principal components affecting the survival rate.
- Implemented 15+ machine learning and deep learning algorithms in Python with an accuracy rate of 82% for the model.

### Data Analysis on Forbes Billionaire List (Link) | Clemson University, USA

Apr 22 – May 22

- Built an analytical hypothesis testing tool using Git, R programming, and Shiny app.
- Combined 10 datasets, analyzed the distribution of wealth over the continents by writing 40+ complex R queries.

## **ADDITIONAL**

**Technical Skills:** Python, C/C++, R, JavaScript, MATLAB, HTML, CSS, Tableau, ARCGIS Pro, PowerBI, Matplotlib, Seaborn, ggplot2, TensorFlow, Keras, Scikit Learn Pandas, Dplyr, Bootstrap, PyGame, GitHub, LaTeX, MS Excel, VBA.

Database Management Skills: SQL, MYSQL, IBM DB2, MS Access, SAS

Certifications & Training: Build Data Analysis tools using R and DPLYR | GIS Fundamentals Workshop Series | Introduction to Big Data | Introduction to Probability and Data with R | Fundamentals of Visualization with Tableau | Excel Skills for Business: Essentials | Data | Science Foundations