

## SUMMARY

As a dedicated Data Scientist with a strong foundation in machine learning, Python, and SQL, I bring a passion for uncovering insights from complex data sets and translating them into actionable strategies. With hands-on experience in various projects and a deep understanding of statistical analysis, predictive modeling, and data visualization, I am committed to driving data-driven decision-making and delivering impactful solutions.

## EDUCATION:

- **Pondicherry Central University, Pondicherry| May 2024**  
Master of Statistics.
- **Government City College, Hyderabad| May 2022**  
Bachelor of science.

## PROJECTS:

### **Analysing the Impact of COVID-19 on Indian Stock Market Trends Using Markov Models:**

Conducted a comprehensive analysis of the Indian stock market trends using six years of data (2017-2023) to examine the impact of COVID-19 on SBI, HDFC, and TCS stocks. Applied Markov Models, including Stochastic Models, TPM, IPV, and stationary matrices, to compare probability distributions and statistical measures across pre-COVID, during COVID, and post-COVID periods.

### **Heart Disease Risk Prediction Using Machine Learning (Pondicherry University 2024):**

Conducted Exploratory Data Analysis to uncover hidden patterns and trends within datasets, employing techniques such as KNN, SVM, logistic regression, and Decision Tree Classification to build robust predictive models. Applied weather data to develop a Risk Prediction model, demonstrating the ability to transform raw data into actionable insights for informed decision-making.

### **Health Insurance Claim Prediction using Regression Analysis (2023)**

Using the Seaborn library in Python, I performed Exploratory Data Analysis (EDA), addressing missing values by replacing them with the mean and handling outliers using the Interquartile Range (IQR) method. I predicted insurance claims utilizing Multiple Linear Regression, Random Forest Regressor, Ridge, and Lasso Regression models. After evaluating the performance of these regression algorithms, I determined that the Random Forest Regressor outperformed the others, achieving an  $R^2$  of 0.93 and an Adjusted  $R^2$  of 0.91.

## SKILLS & ABILITIES:

- **Data Science:** Python, R, SQL, Excel, Statistics, Machine Learning.
- **Data visualizing:** Power BI (Fundamentals).
- Descriptive statistics, Sampling Techniques, and Statistical inference Mathematics.

## CERTIFICATIONS

- Supervised Machine Learning: Regression and Classification (Coursera)
- SQL for Data Science (Great learning)
- Intro to machine learning (Kaggle)
- Intro to SQL (Kaggle)

## ACHIEVEMENTS:

- Won first prize in the state level computation of JIGNASA Telangana State Student Study Projects initiative, which was launched in 2022.
- Selected for the state-level 'Science Congruence Project' competition.

## LEADERSHIP QUALITIES:

- Led a successful academic project as a project team leader, managing a team of 5 members and coordinating tasks to achieve  $R^2$  of 0.93 and an Adjusted  $R^2$  of 0.91.
- Led the financial committee for a Bathukamma festival celebration with over 500 participants at Pondicherry University.
- Served as Student President at the school level.