# PRAYAG UPADHYAY

+91 6351620112 | prayagupadhyay8890@gmail.com https://www.linkedin.com/in/p1220 https://github.com/Prayagupadhyay Sattadhar, Ahmedabad 380061

#### **PROFESSIONAL SKILLS**

- Machine Learning (Supervised and Unsupervised)
- Python (Pandas, NumPy, MatPlotLib, seaborn)
- SQL (MySQL)
- Tableau (Data Visualization)
- Extract Transfer Load
- Hadoop (basic)

- Deep Learning (ANN, CNN)
- Statistics (Descriptive and inferential)
- Data Analysis
- Exploratory Data Analysis
- Data Manipulation
- Predictive Modeling

#### **PROJECTS**

#### IMAGE CLASSIFICATION - DEEPLEARNING + AI (CONVOLUTIONAL NEURAL NETWORK)

OBJECTIVE - Optimize a CNN for image classification (dog vs. cat) using Deep Learning and AI.

January 2024

- Conducted comprehensive preprocessing on a dataset of 8,000 images for training and 2,000 images for testing, optimizing data through techniques such as normalization and augmentation.
- Engineered a CNN with 2 convolutions, max pooling, flattening, and a single fully connected layer, achieving an 80% accuracy in
  distinguishing dog and cat images.

#### CARDIAC ARREST PREDICTION - PYTHON + MACHINELEARNING (CLUSTERING)

OBJECTIVE - Predict Cardiac Arrest using Python and Machine Learning Clustering techniques

December 2023

- Applied K-means clustering to analyze patterns within the dataset.
- Visualized hierarchical clustering using Scipy for enhanced data structure understanding.
- Calculated and presented a silhouette score (0.4718) as an evaluation metric for cluster quality.

## BREAST CANCER PREDICTION - PYTHON + MACHINE LEARNING (LOGISTIC REGRESSION)

OBJECTIVE - Develop a precise breast cancer prediction model using Logistic Regression in Python

November 2023

- Developed and fine-tuned a Logistic Regression model with 90%+ accuracy for breast cancer prediction, distinguishing between benign (Class 2) and malignant (Class 4) cases.
- Implemented advanced algorithms, achieving a 92% precision score and 91% recall rate, showcasing the model's ability to accurately identify malignant cases while minimizing false positives and done predictive modeling

## EMPLOYEE SALARY PREDICTION - PYTHON + MACHINELEARNING (LINEARREGRESSION)

OBJECTIVE - Predict employee salaries using Python and ML (Linear Regression)

October 2023

- Addressed 95% of null values during data preprocessing, ensuring data quality and reliability for analysis.
- Divided the dataset meticulously into precise **training and test sets**, resulting in a substantial 15% accuracy improvement upon training **a linear regression** model and make a statistical Algorithm

## **EDUCATION**

**BACHELOR OF SCIENCE IN MATHEMATICS** – Bhupal Nobles University – Udaipur, Rajasthan

June 2024

Percentage: 78%

SENIOR SECONDARY EXAMINATION - Springdales Sr Sec School - (Rajasthan, Dungarpur, Sagwara)

June 2020

Percentage: 74.20%

**SECONDARY EXAMINATION** – Springdales Sr Sec School – (Rajasthan, Dungarpur, Sagwara)

June 2018

Percentage: 77.33%

#### **CERTIFICATIONS**