

Individual Contributions – GROUP -30

Datasets Used: Bank (4,521), Heart (303), Wine (178), Breast (569), Churn (10,000)

Performance Metrics: Accuracy, Precision, Recall, F1-Score

Contributions

- **Roll No. S20230010169: Saketh Pabbi (Leader)**
Implemented Logistic Regression from scratch using gradient descent.
Led project coordination and evaluation pipeline.
Showed Accuracy, Precision, Recall, F1-Score across all 5 datasets.
- **Roll No. S20230010157: M Sai Pavan**
Implemented Linear SVM with hinge loss and margin maximization.
Optimized training and hyperparameter tuning.
Showed Accuracy, Precision, Recall, F1-Score across all 5 datasets.
- **Roll No. S20230010217: Bhargav Reddy**
Implemented Decision Tree (CART) using Gini impurity.
Built recursive tree and ensured compatibility.
Showed Accuracy, Precision, Recall, F1-Score across all 5 datasets.
- **Roll No. S20230010229: Naga Sai Praveen**
Implemented Weighted KNN with distance-based voting.
Optimized neighbor search and visualization.
Showed Accuracy, Precision, Recall, F1-Score across all 5 datasets.