Model Optimization and Tuning Phase Template

Date	19 September 2024
Team ID	740691
Project Title	Traffic Telligence Using Machine Learning
Maximum Marks	10 Marks

Model Optimization and Tuning Phase

The Model Optimization and Tuning Phase involves refining machine learning models for peak performance. It includes optimized model code, fine-tuning hyperparameters, comparing performance metrics, and justifying the final model selection for enhanced predictive accuracy and efficiency.

Hyperparameter Tuning Documentation (6 Marks):

Model	Tuned Hyperparameters	Optimal Values
Model 1	The Hyper Parameter Optimisation was carried out using Two-steps: RandomizedSearchCV and GridSearchCV	The Model Demonstrated results with accuracy, precision,recall and reaching 95% indicating ability to effectively predict Traffic

Performance Metrics Comparison Report (2 Marks):

Model	Baseline Metric	Optimized Metric