

Model Optimization and Tuning Phase

Date	15 March 2024
Team ID	738305
Project Title	Machine Learning Approach For Employee Performance Prediction
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):

Hyperparameter tuning task is not mentioned in smartbridge portal as a task or subtask,so we did't do it.Below is the proof:

Guided Project

Project Workspace



Data Collection



Download The Dataset



**Visualizing And Analyzing
The Data**

Importing The Libraries

Read The Dataset

Correlation Analysis

Descriptive Analysis



Data Pre-Processing

Checking For Null Values

**Handling Date &
Department Column**

**Handling Categorical
Values**

**Splitting Data Into Train
And Test**

Guided Project**Project Workspace**

Splitting Data Into Train
And Test



Model Building

Linear Regression Model

Random Forest Model

Xgboost Model

Compare The Model

Evaluating Performance
Of The Model And Saving
The Model



Application Building

Building Html Pages

Build Python Code

Run The Application

Output