

Model Optimization and Tuning Phase Template

Model	Tuned Hyperparameters
Model 1(VGG-16)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
Model 2(ResNet50)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
Model 3(Inception)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
Model 4(Xception)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
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Team ID	LTVIP2026TMIDS50689
Project Title	Dog Breed Identification using Transfer Learning
Maximum Marks	10 Marks

Model Optimization and Tuning Phase

The Model Optimization and Tuning Phase involves refining neural network 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 (8 Marks):

Final Model Selection Justification (2 Marks):

Final Model	Reasoning
Model 4 (Xception)	This model gave better accuracy than other models.