

Model Development Phase Template

Date	31/01/2026
Team ID	LTVIP2026TMIDS5214
Project Title	Dog Breed Identification using Transfer Learning

Model Selection Report

In the model selection report for future deep learning and computer vision projects, various architectures, such as CNNs or RNNs, will be evaluated. Factors such as performance, complexity, and computational requirements will be considered to determine the most suitable model for the task at hand.

Model Selection Report:

Model	Description
Model 1	This model is build using the VGG-16 architecture by applying transfer learning. The top layer is replaced with the dense layer with 8 neurons and sigmoid activation function. The model got an accuracy of 100 for 10 epochs.
Model 2	This model is build using the ResNet-50 architecture by applying transfer learning. The top layer is replaced with the dense layer with 8 neurons and sigmoid activation function. The model got an accuracy of 42 for 10 epochs.

Model 3	This model is build using the Inception architecture by applying transfer learning. The top layer is replaced with the dense layer with 8 neurons and sigmoid activation function. The model got an accuracy of 28.5 for 10 epochs.
Model 4	This model is build using the Xception architecture by applying transfer learning. The top layer is replaced with the dense layer with 8 neurons and sigmoid activation function. The model got an accuracy of 100 for 10 epochs.