

Model Optimization and Tuning Phase Template

Date	10 July 2024
Team ID	SWTID1720158583
Project Title	Vitamin Vision: Unveiling The Spectrum Of Nutrient Detection
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):

Model	Tuned Hyperparameters
Model 1	<pre>for layer in base_model.layers[:-10]: layer.trainable = False for layer in base_model.layers[-10:]: layer.trainable = True</pre> <p>Unfreezing the last 10 layers to train them</p>

Model 2	<pre>for layer in base_model.layers[:-10]: layer.trainable = False for layer in base_model.layers[-10:]: layer.trainable = True</pre> <p>Unfreezing the last 10 layers for training</p>
...	...

Final Model Selection Justification (2 Marks):

Final Model	Reasoning
Model 1	Comparatively it has high accuracy