

## Model Development Phase Template

Date	08 July 2024
Team ID	SWTID1720201335
Project Title	Rice Type Classification Using Cnn
Maximum Marks	5 Marks

### 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
VGG16	<b>VGG16</b> is a deep convolutional neural network architecture that consists of 16 layers, which include 13 convolutional layers and 3 fully connected layers. It uses small receptive fields (3x3 filters) and is known for its simplicity and uniformity. VGG16 was introduced by the Visual Geometry Group (VGG) at the University of Oxford.
ResNet50	<b>ResNet50</b> is a deep residual network with 50 layers. It introduced the concept of residual learning with shortcut connections that bypass one or more layers. This helps to address the vanishing gradient problem and allows the training of much deeper networks. ResNet50 is part of the ResNet family developed by Microsoft Research.

MobileNet V4	<b>MobileNet V4 is an improved version of the MobileNet architecture, designed for efficient performance on mobile and embedded devices. It includes architectural enhancements and uses squeeze-and-excitation blocks for dynamic channel-wise feature recalibration, making it more efficient and accurate.</b>
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