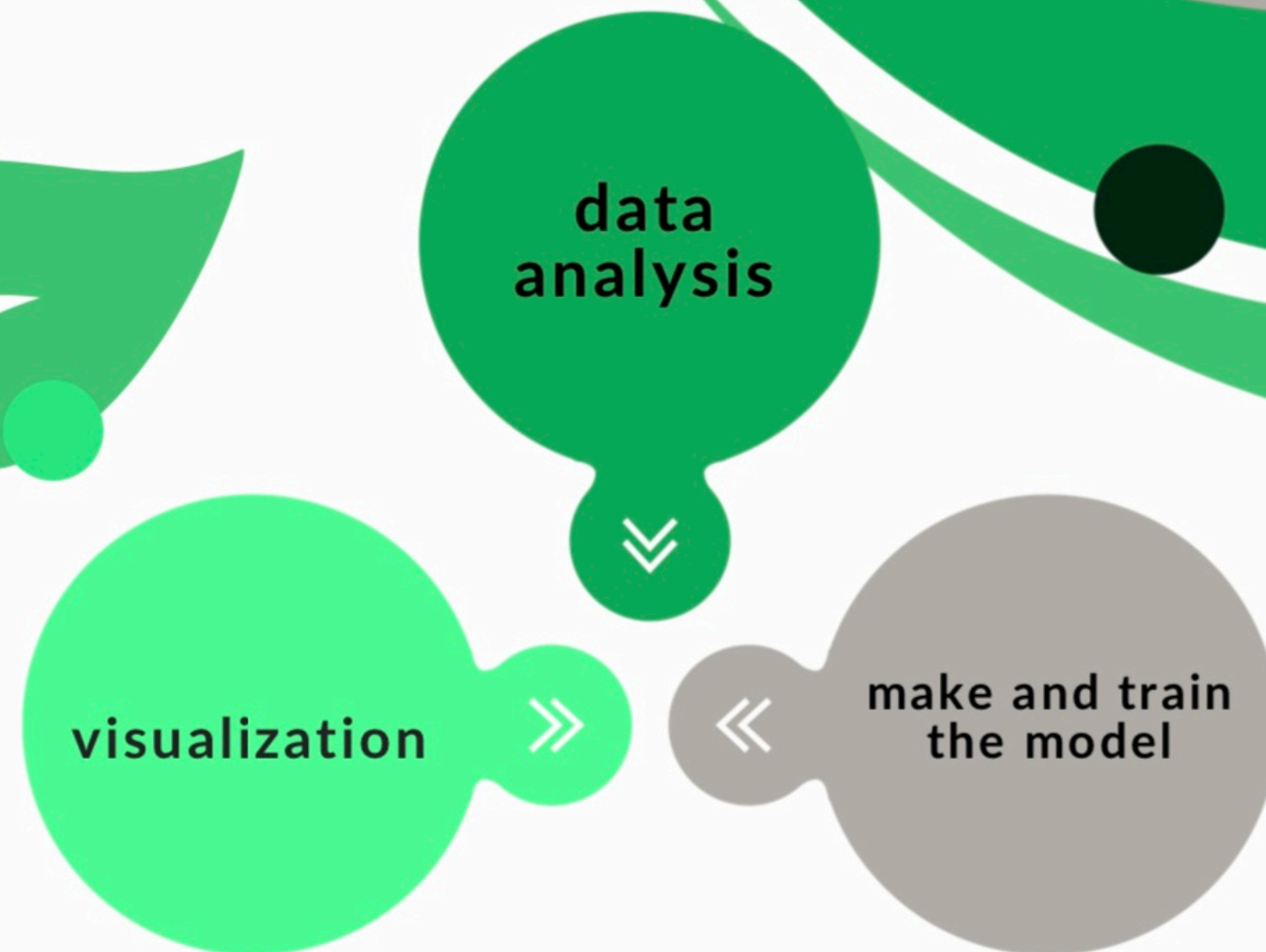
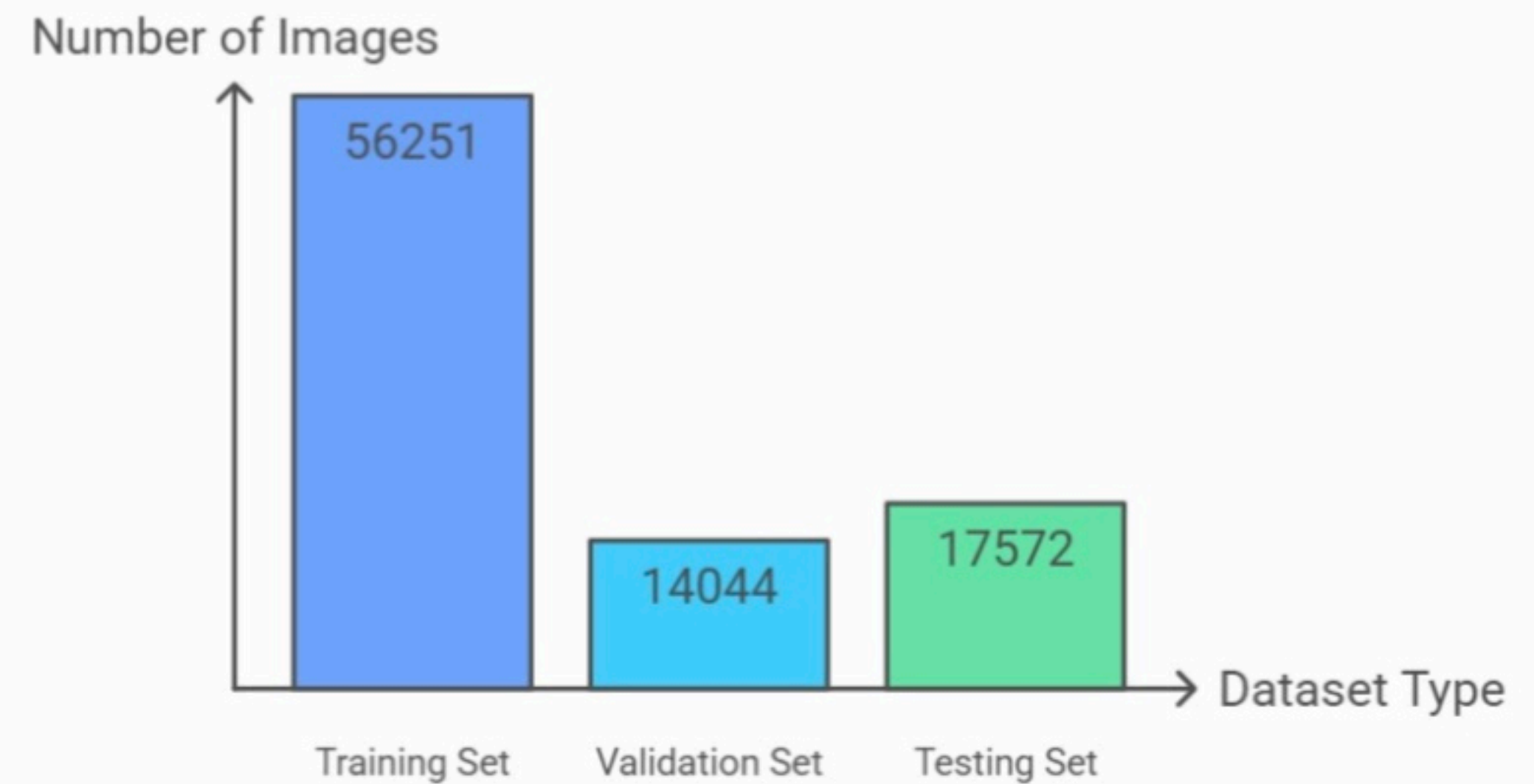
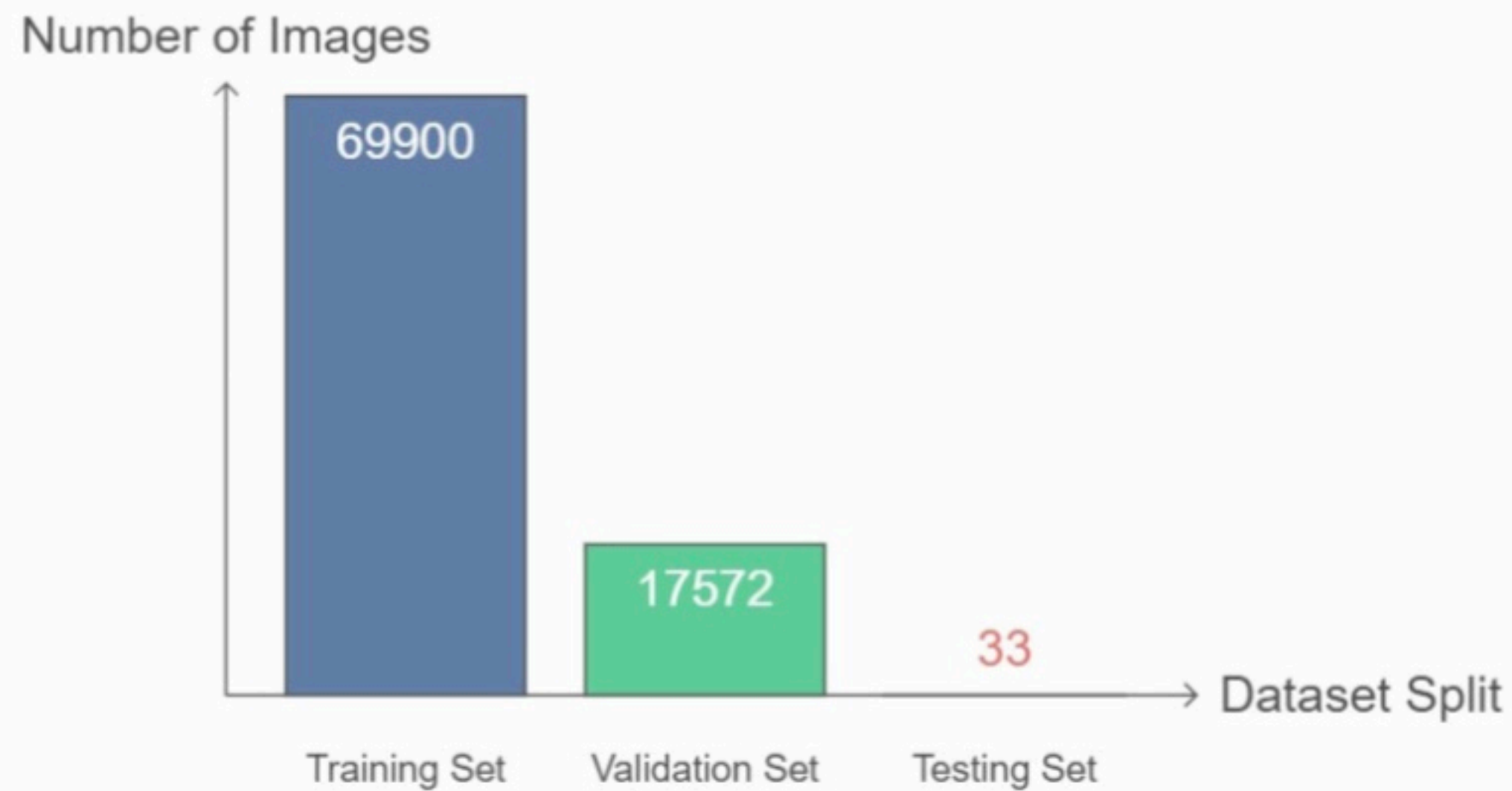


Machine Learning Model (CNN)

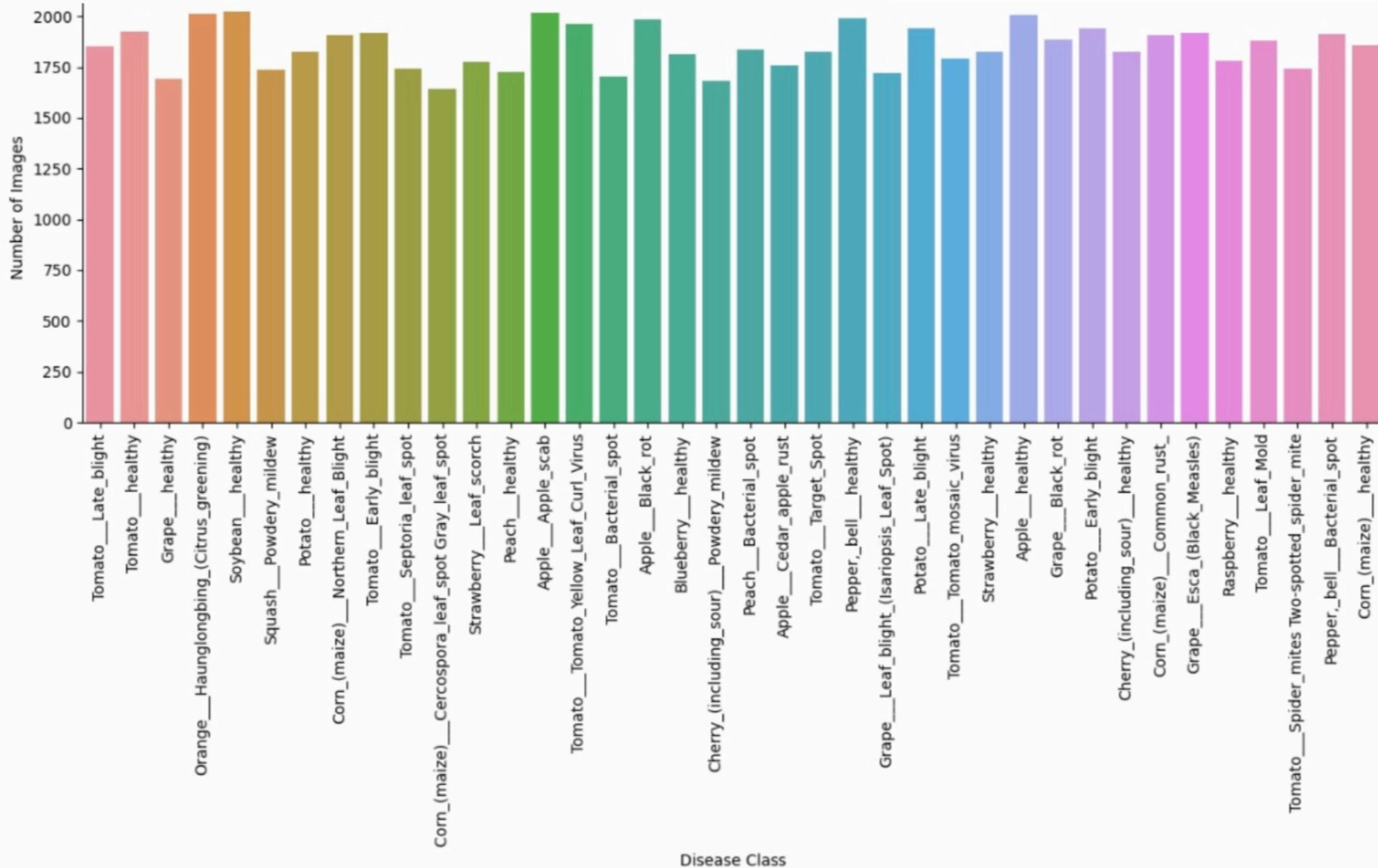


[github source code](#)

Splitting Dataset



80% Training & Validation
20% Test



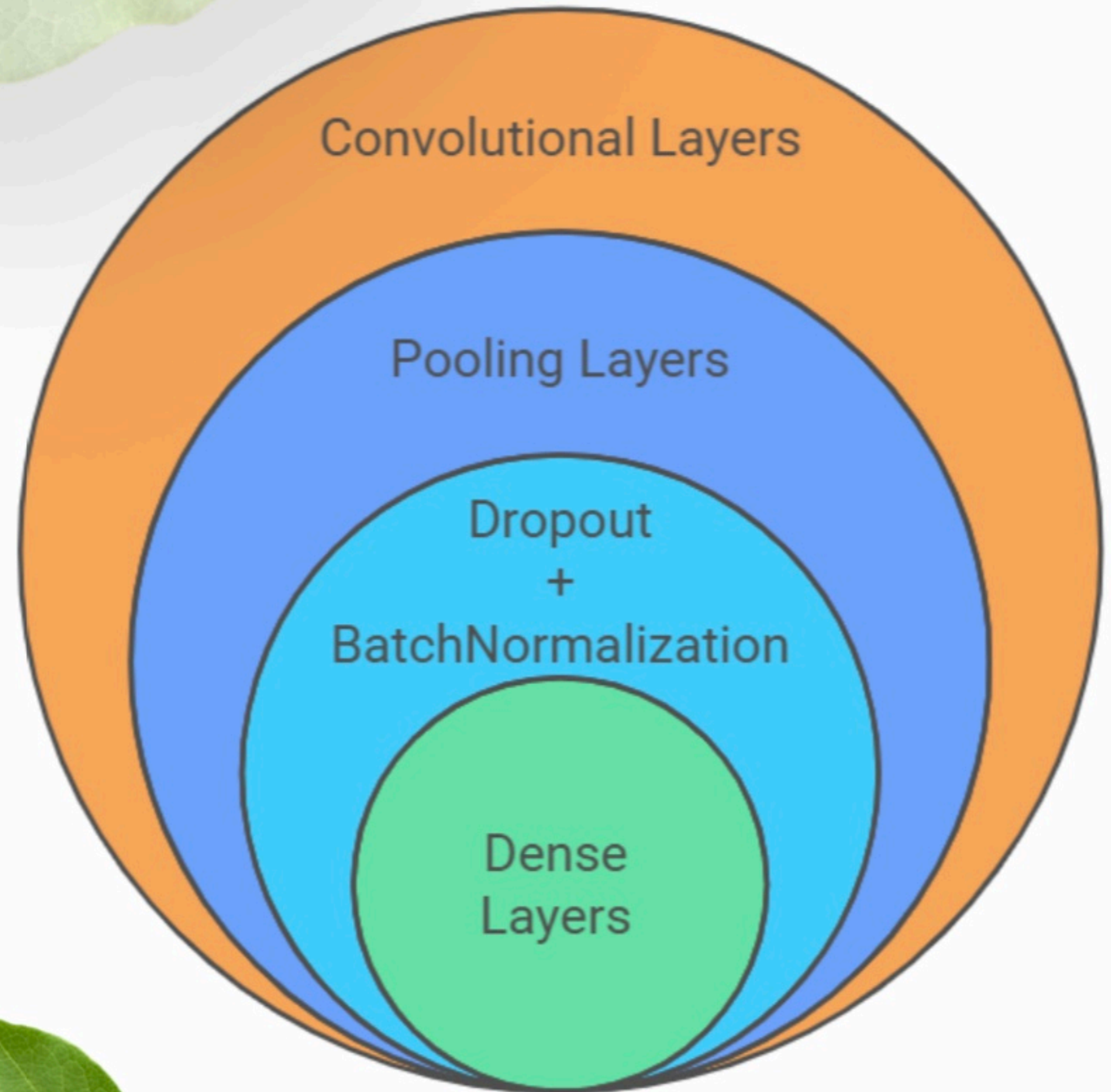


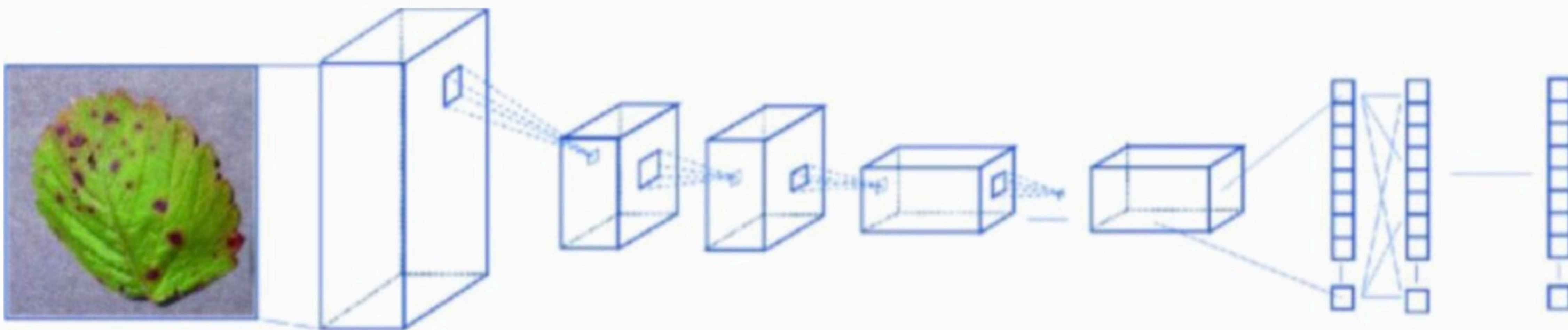
Data Preprocessing

- Images are loaded directly from their directories using ImageDataGenerator.
- Only rescaling of pixel values is applied during loading to normalize the data

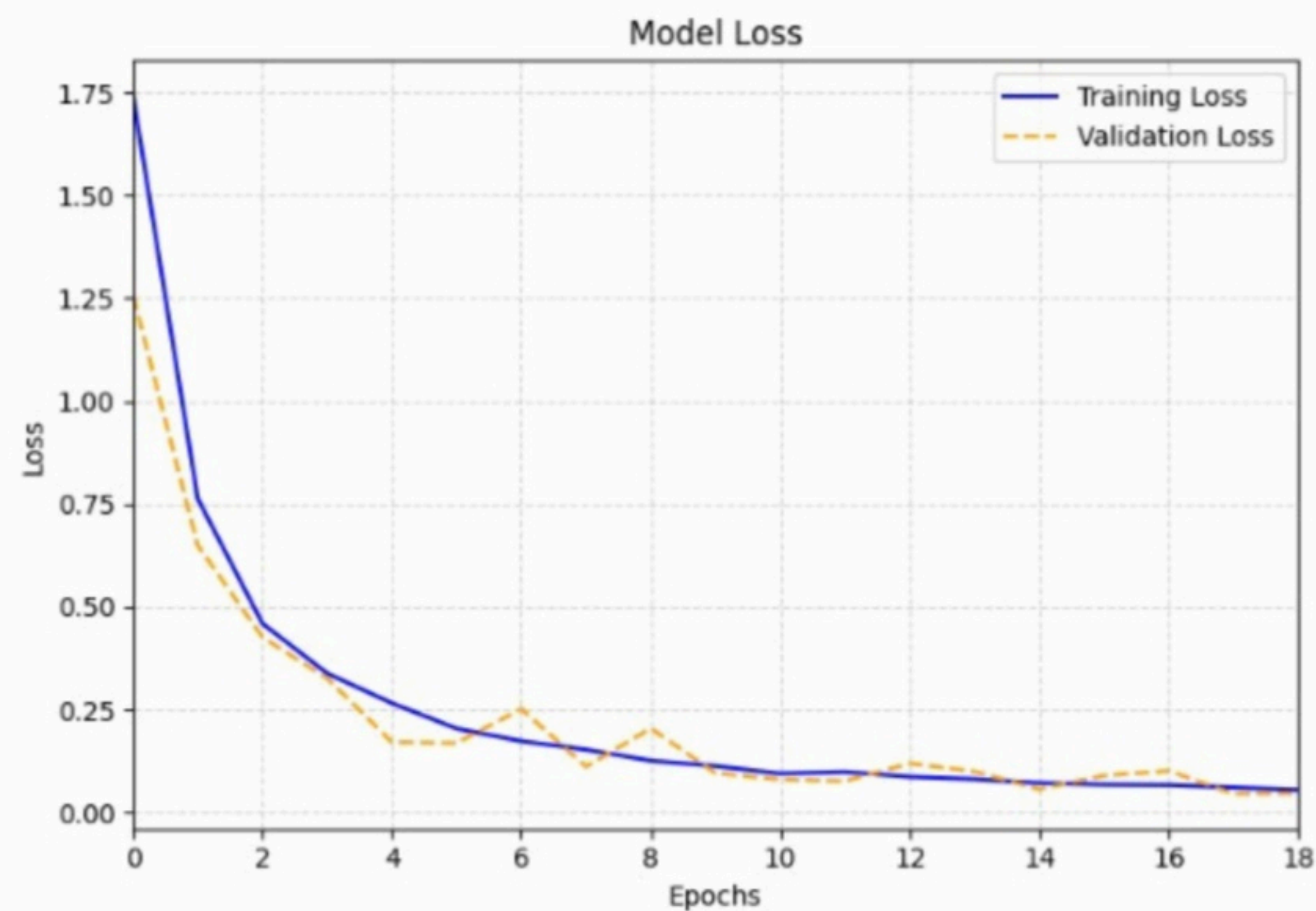
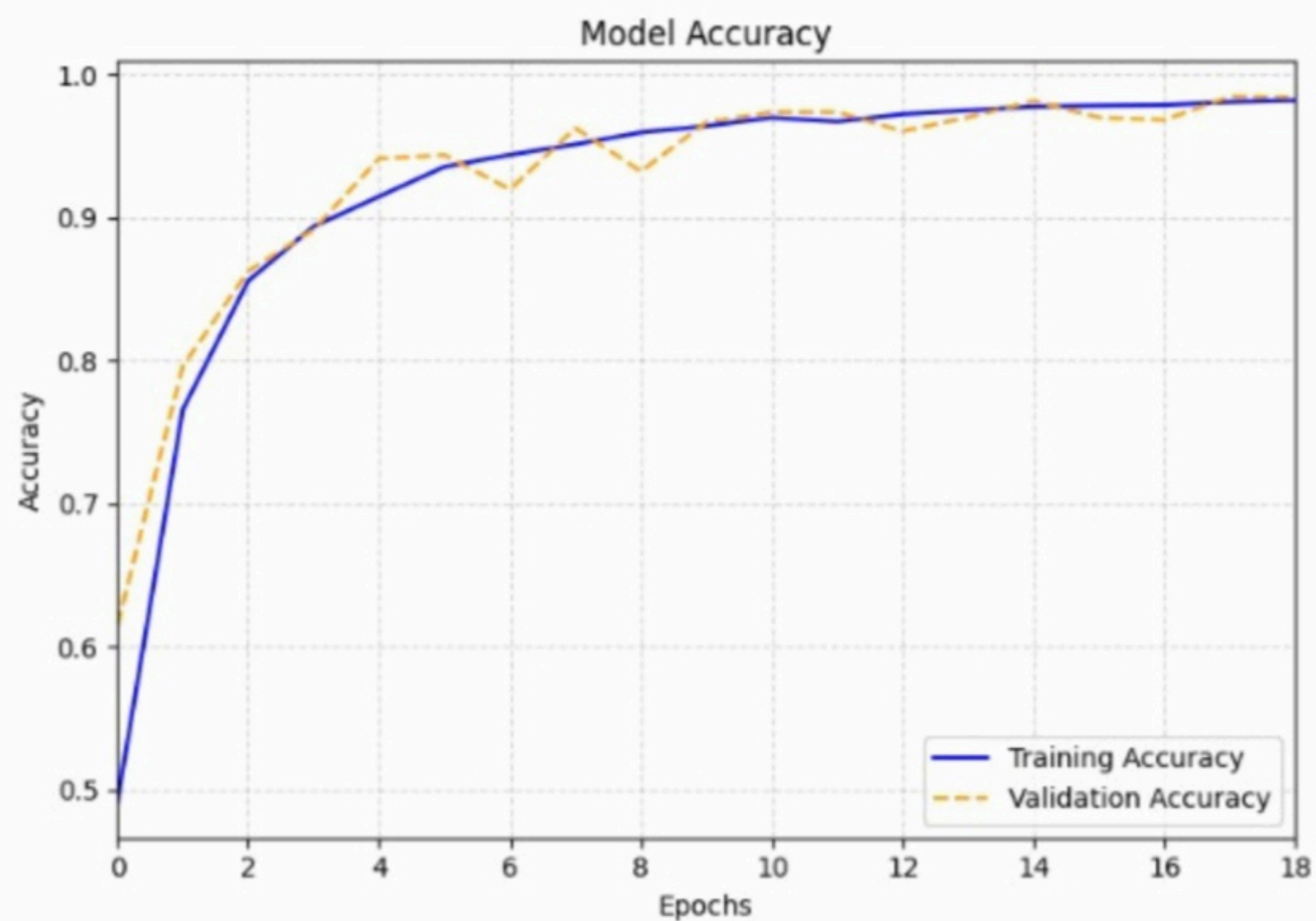
Detailed Model Layers

- 6 Conv2D
- 4 Pooling(Max + Global)
- 4 Dense
- 3 BatchNormalization
- 3 Dropout





Evaluate model accuracy and loss



Model Accuracy

<i>Macro avg</i>	<i>Precision</i>	<i>Support</i>	<i>Model</i>
<i>Training</i>	0.98	56251	CNN
<i>Validation</i>	0.984	14044	CNN
<i>Tasting</i>	0.987	17572	CNN

VISUALIZATION OF PREDICTIONS

True: CornCommonRust1
Predicted: Corn_(maize)___Common_rust_



True: CornCommonRust3
Predicted: Corn_(maize)___Common_rust_



True: TomatoEarlyBlight1
Predicted: Tomato___Early_blight



Evaluation Matrix for 38 class

