



CSE366: Artificial Intelligence (Section 4)

[Spring 2024]

Assignment 03: Computer Vision Assignment Using Different Models

Submitted to

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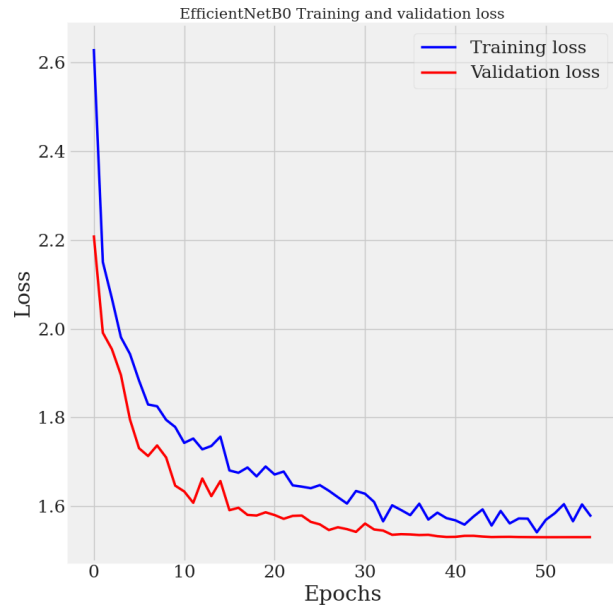
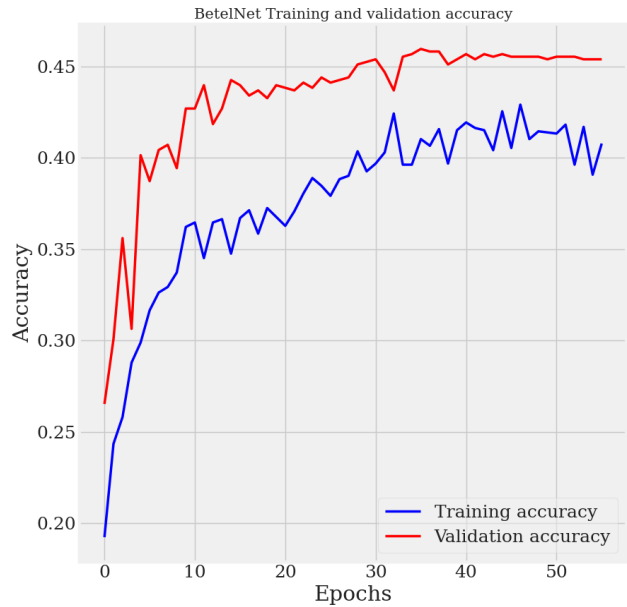
CSE 366: Artificial Intelligence - Computer Vision Assignment

Summary: We have used a dataset to train machine learning models like EfficientNetB0 and ResNet-50. These models can classify leaves based on the elements required to survive. The dataset required more preprocessing to get better accuracy for object classification.

Model Evaluation:

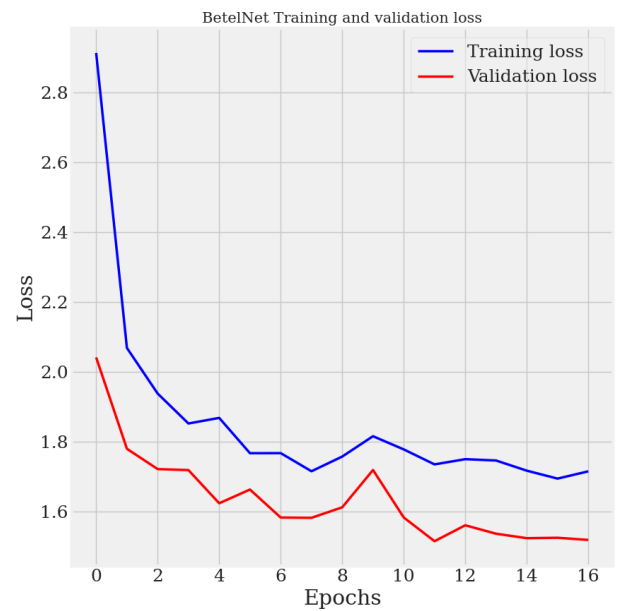
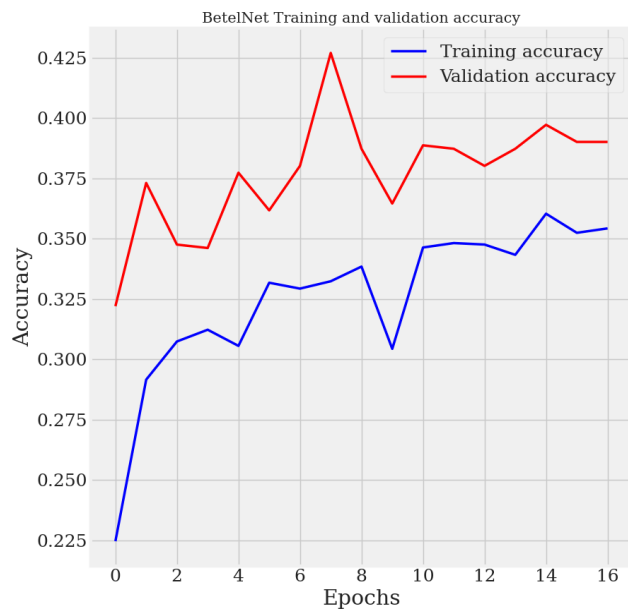
Model	Accuracy	Precision	Recall	F1-Score
EfficientNetB0	53.44%	0.495978	0.534392	0.473963
ResNet-50	36.51%	0.148299	0.365079	0.206460

1) EfficientNetB0:



The loss curve of EfficientNetB0 is not bad but its accuracy for object classification is below the mark. This is happening for dataset preprocessing and the dataset is not in good condition.

2) ResNet-50:



The same goes for the ResNet-50 loss curve. It is not bad but the dataset is bad and requires more processing.