

CS 699 - Project

Bird Image Classification and Visualization

1 Image Classification

Uploaded image:



Prediction: Little Egret

Classifier: Random Forest

Top 5 predictions:

S.No.	Species Name	Prediction Probability
1	Blue Jay	0.15
2	Grey Heron	0.03
3	Indian Peafowl	0.04
4	Little Egret	0.73
5	Red-Vented Bulbul	0.05

Species wise prediciton probability

2 Model Report

Classifier: Random Forest

Dataset: Images scrapped from eBird Portal for species classification across 5 species.

Total images: 5000

Train-Test Split: 80:20

Species:

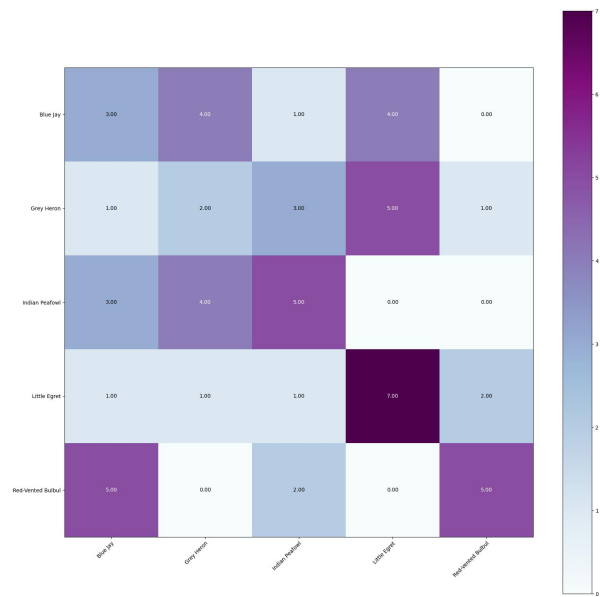
[noitemsep]Blue Jay Grey Heron Indian Peafowl Little Egret Red-Vented Bulbul

Metrics:

Classification Report:

	precision	recall	f1-score	support
Blue Jay	0.23	0.25	0.24	12
Grey Heron	0.18	0.17	0.17	12
Indian Peafowl	0.42	0.42	0.42	12
Little Egret	0.44	0.58	0.50	12
Red-Vented Bulbul	0.62	0.42	0.50	12
accuracy			0.37	60
macro avg	0.38	0.37	0.37	60
weighted avg	0.38	0.37	0.37	60

Confusion Matrix:



Accuracy Plot:

