

CS 699 - Project

Bird Image Classification and Visualization

1 Image Classification

Uploaded image:



Prediction: Grey Heron

Classifier: SVM

Top 5 predictions:

S.No.	Species Name	Prediction Probability
1	Blue Jay	0.24
2	Grey Heron	0.27
3	Indian Peafowl	0.17
4	Little Egret	0.23
5	Red-Vented Bulbul	0.08

Species wise prediciton probability

2 Model Report

Classifier: SVM

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

Total images: 5000

Train-Test Split: 80:20

Species:

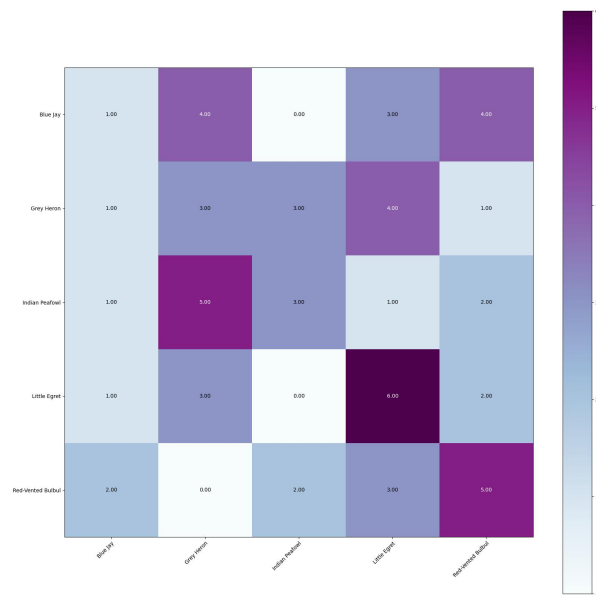
1. Blue Jay
2. Grey Heron
3. Indian Peafowl
4. Little Egret
5. Red-Vented Bulbul

Metrics:

Classification Report:

	precision	recall	f1-score	support
Blue Jay	0.17	0.08	0.11	12
Grey Heron	0.20	0.25	0.22	12
Indian Peafowl	0.38	0.25	0.30	12
Little Egret	0.35	0.50	0.41	12
Red-Vented Bulbul	0.36	0.42	0.38	12
accuracy			0.30	60
macro avg	0.29	0.30	0.29	60
weighted avg	0.29	0.30	0.29	60

Confusion Matrix:



Accuracy Plot:

