

CS 699 - Project

Bird Image Classification and Visualization

1 Image Classification

Uploaded image:



Prediction: Red-Vented Bulbul

Classifier: SVM

Top 5 predictions:

S.No.	Species Name	Prediction Probability
1	Blue Jay	0.25736201882941784
2	Grey Heron	0.21008065131897025
3	Indian Peafowl	0.08892648909062341
4	Little Egret	0.12540957486488516
5	Red-Vented Bulbul	0.31822126589610333

Species wise predicton 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:

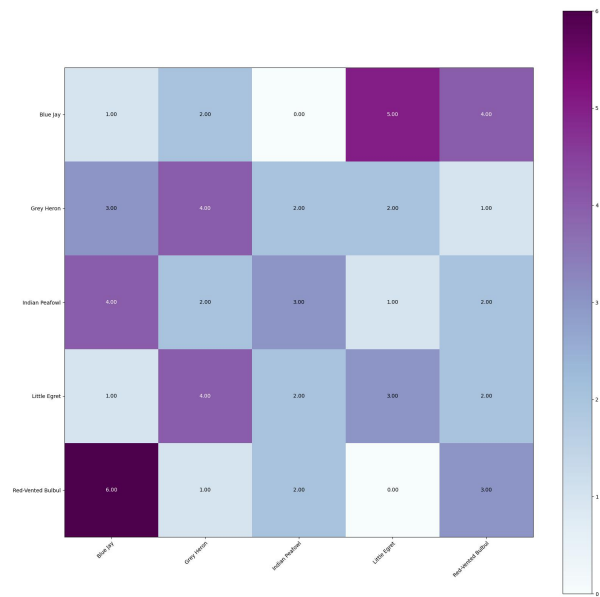
1. Blue Jay
2. Grey Heron
3. Indian Peafowl
4. Little Egret
5. Red-Vented Bulbul

Metrics:

Classification Report:

	precision	recall	f1-score	support
Blue Jay	0.07	0.08	0.07	12
Grey Heron	0.31	0.33	0.32	12
Indian Peafowl	0.33	0.25	0.29	12
Little Egret	0.27	0.25	0.26	12
Red-Vented Bulbul	0.25	0.25	0.25	12
accuracy			0.23	60
macro avg	0.25	0.23	0.24	60
weighted avg	0.25	0.23	0.24	60

Confusion Matrix:



Accuracy Plot:

