



Image Classification: Art Style

Trystan Knowles

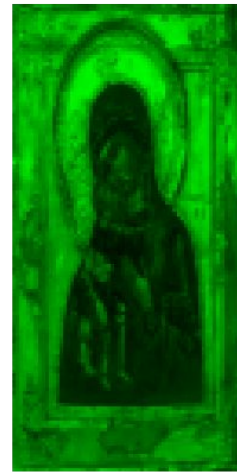
Iconography



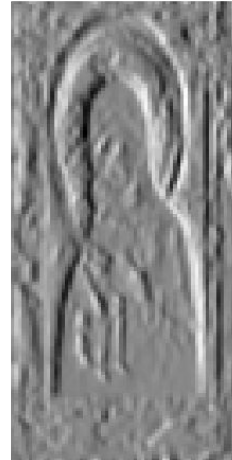
Painting



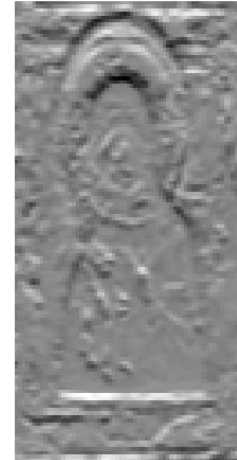
Feature Engineering



HOG: X Direction



HOG: Y Direction



Feature Engineering (cont)

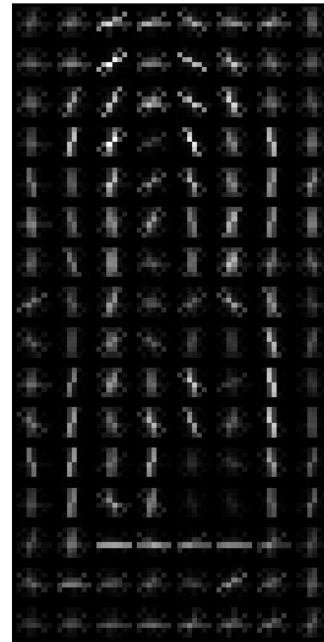
Speeded Up Robust Features (SIFT)



Input image

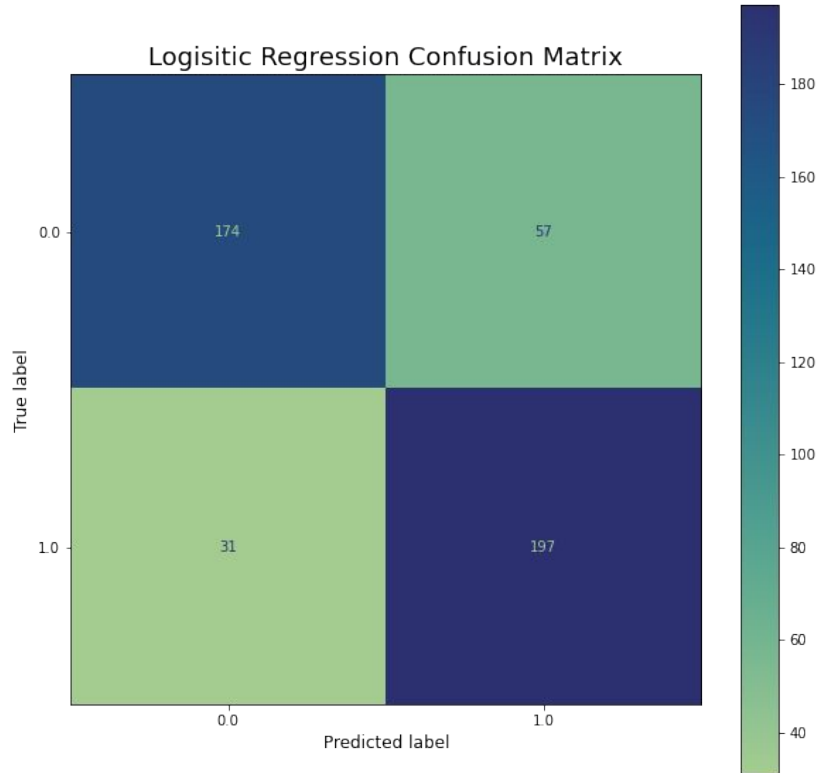


Histogram of Oriented Gradients

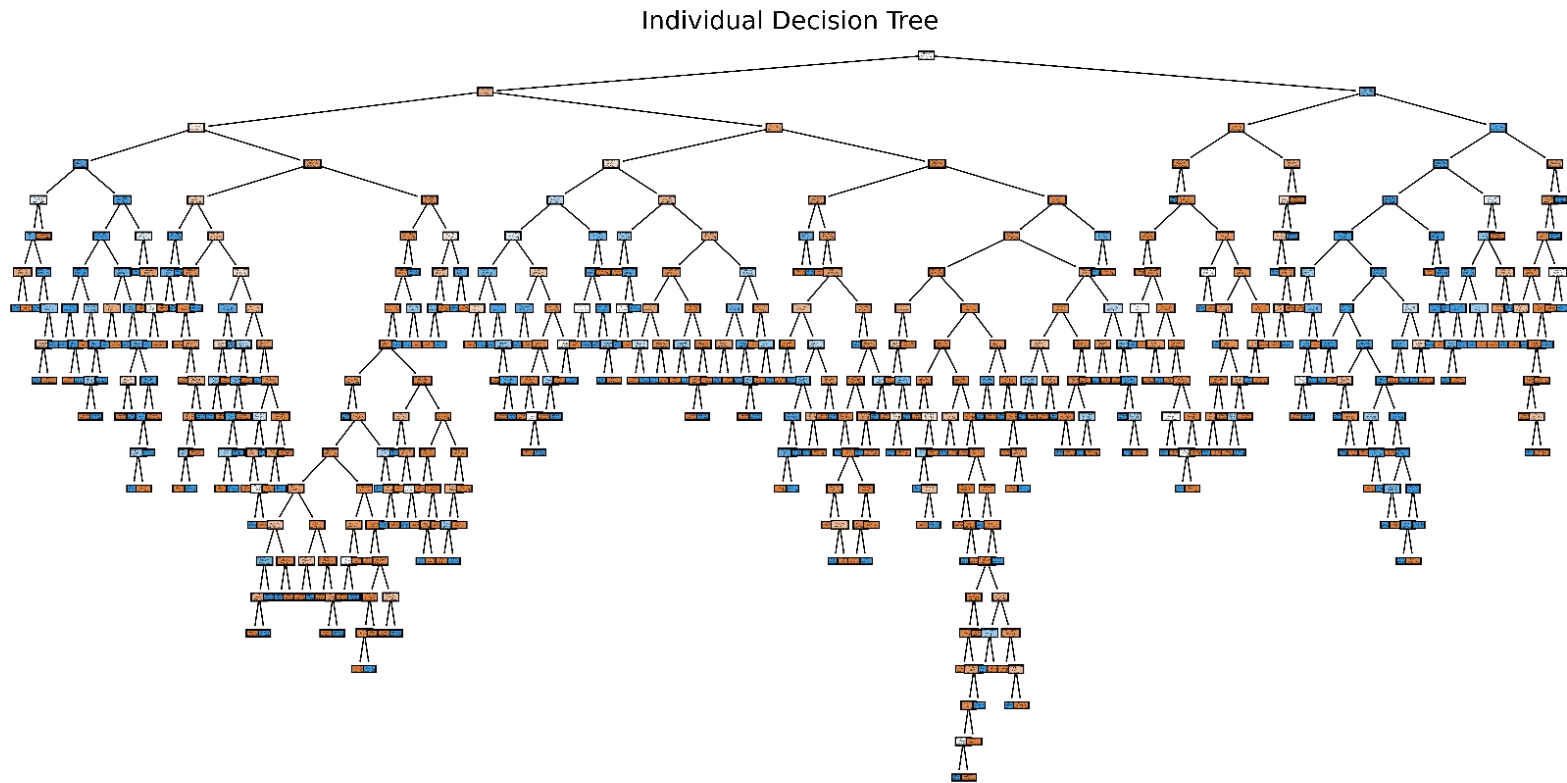


Logistic Regression Model Performance

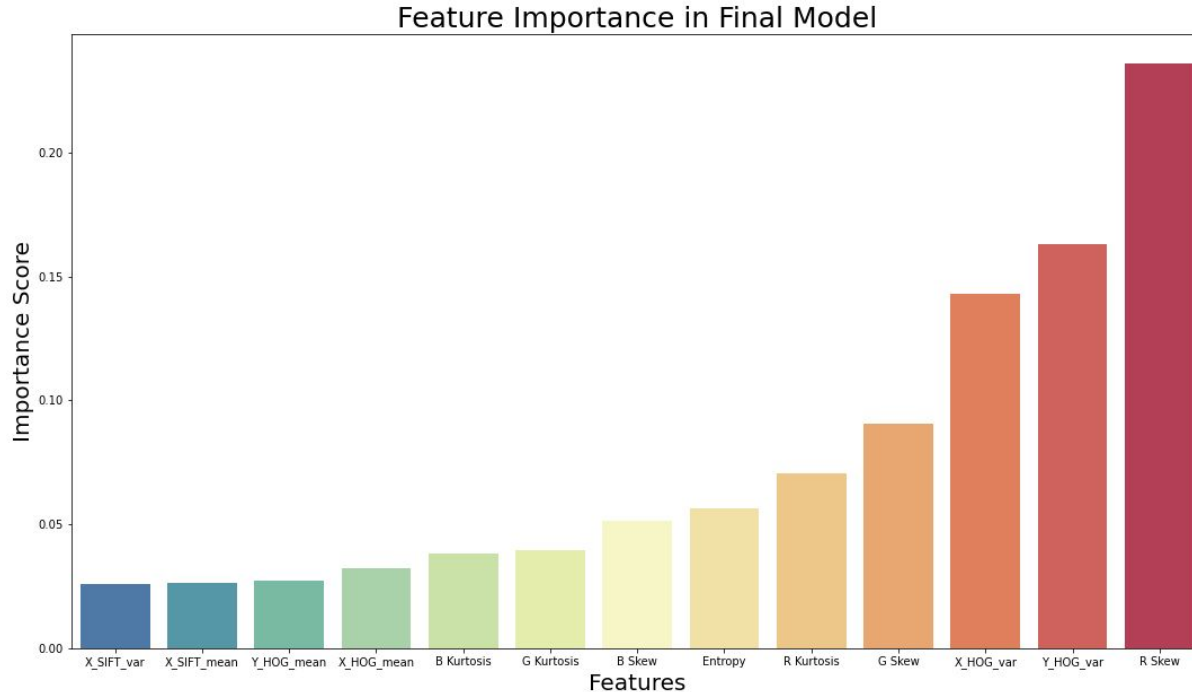
Accuracy: .81
Precision: .81
Recall: .81
F1: .81



Final Model: Random Forest



Feature Importance



Top Features:

Red Skew
Y HOG Variance
X HOG Variance
Green Skew
Red Kurtosis
Entropy

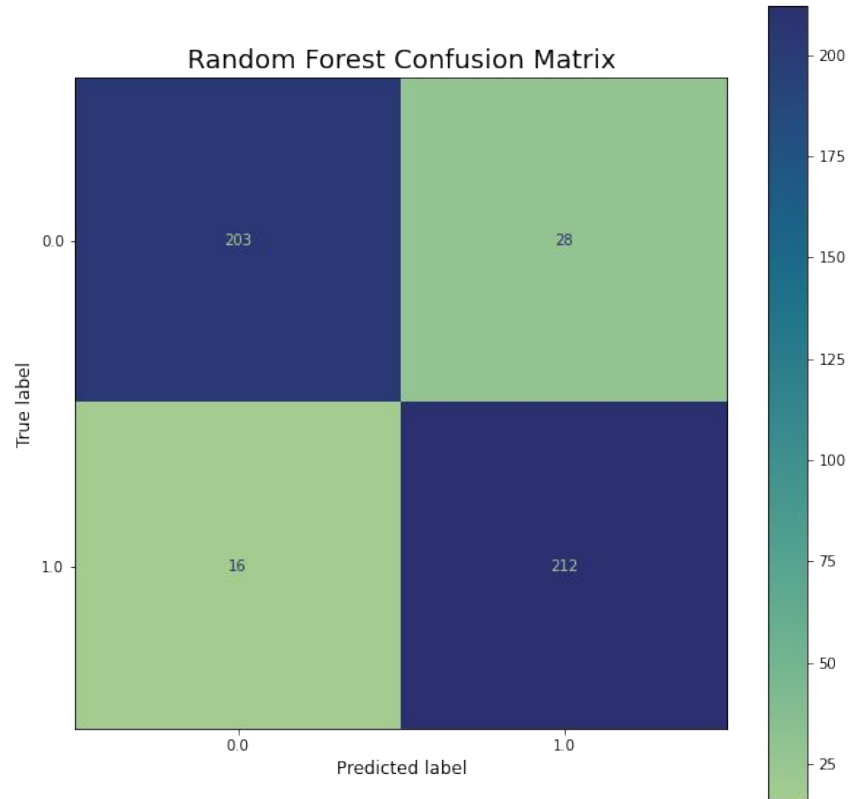
Best Model Performance:

Accuracy: .92

Precision: .92

Recall: .92

F1: .92



Contact Information



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Thank You!