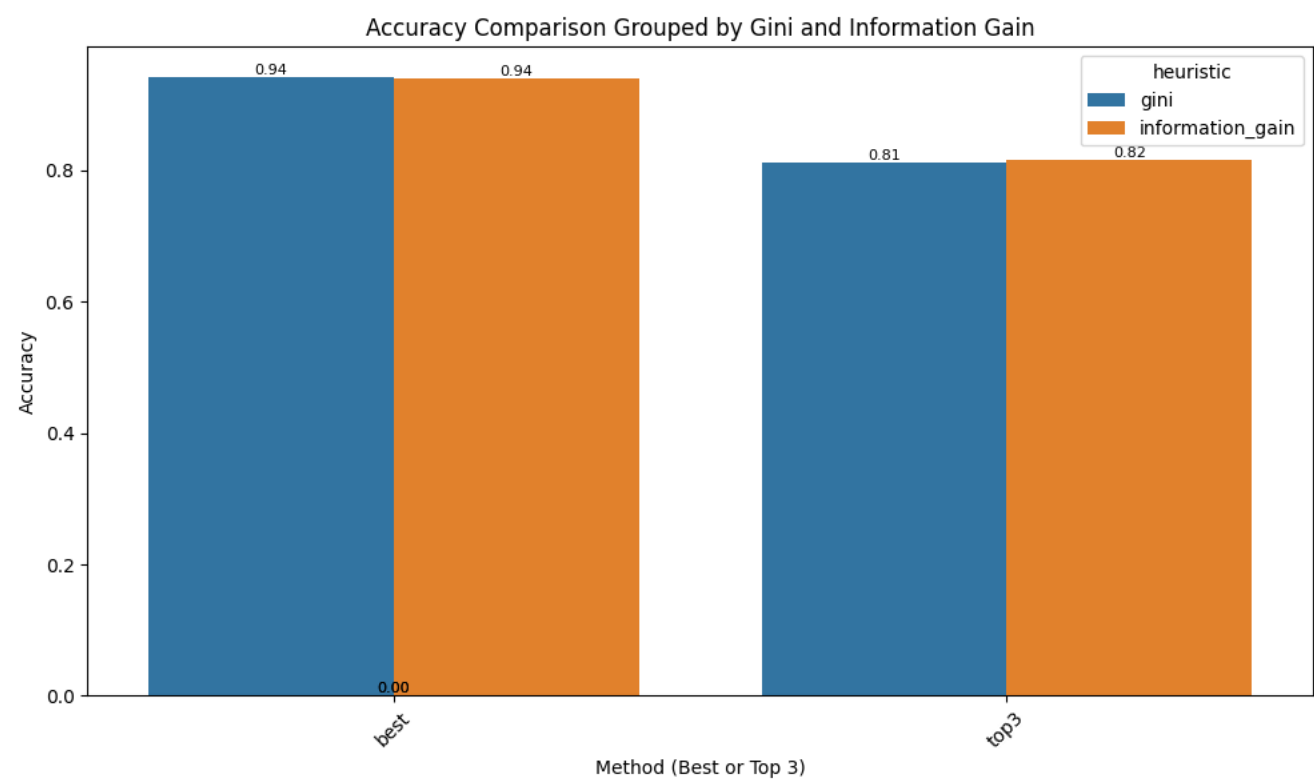


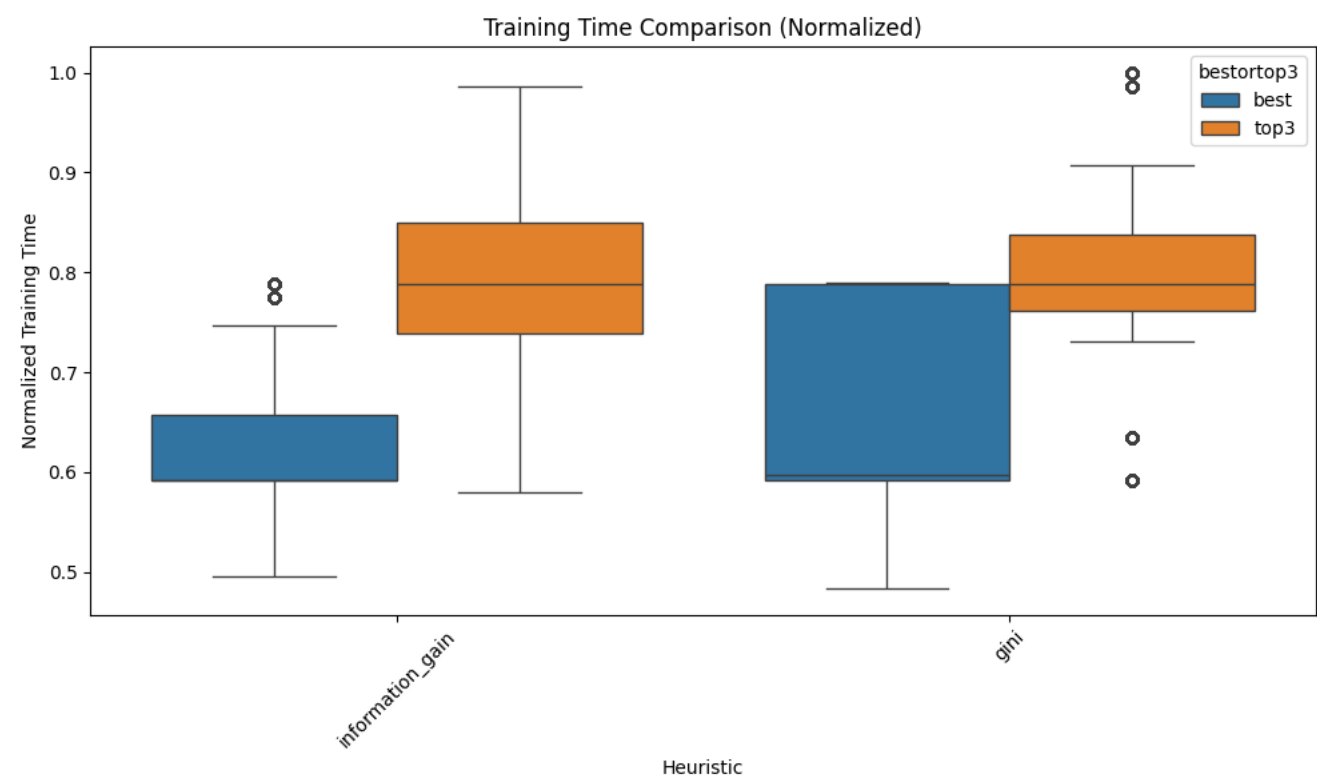
# Decision Tree Performance Report

This report evaluates the performance of decision tree models.

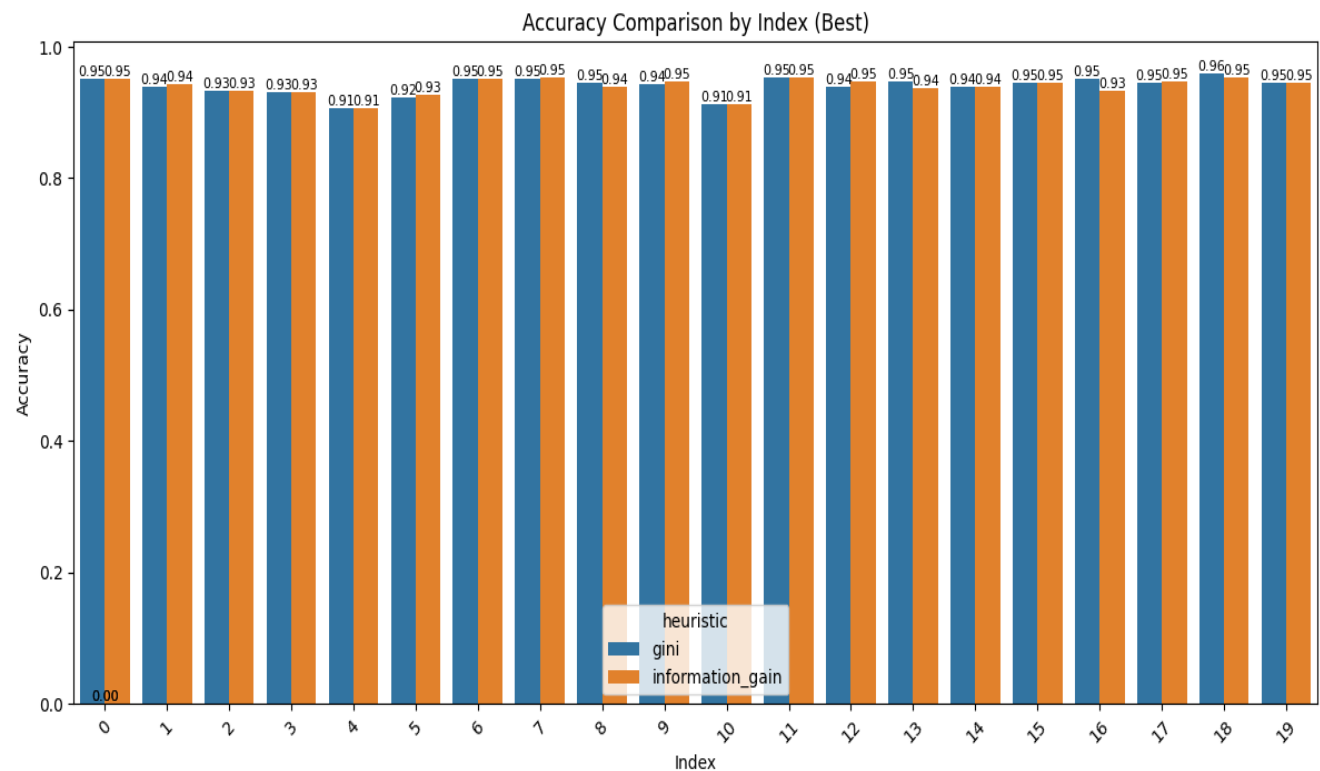
# Accuracy Comparison



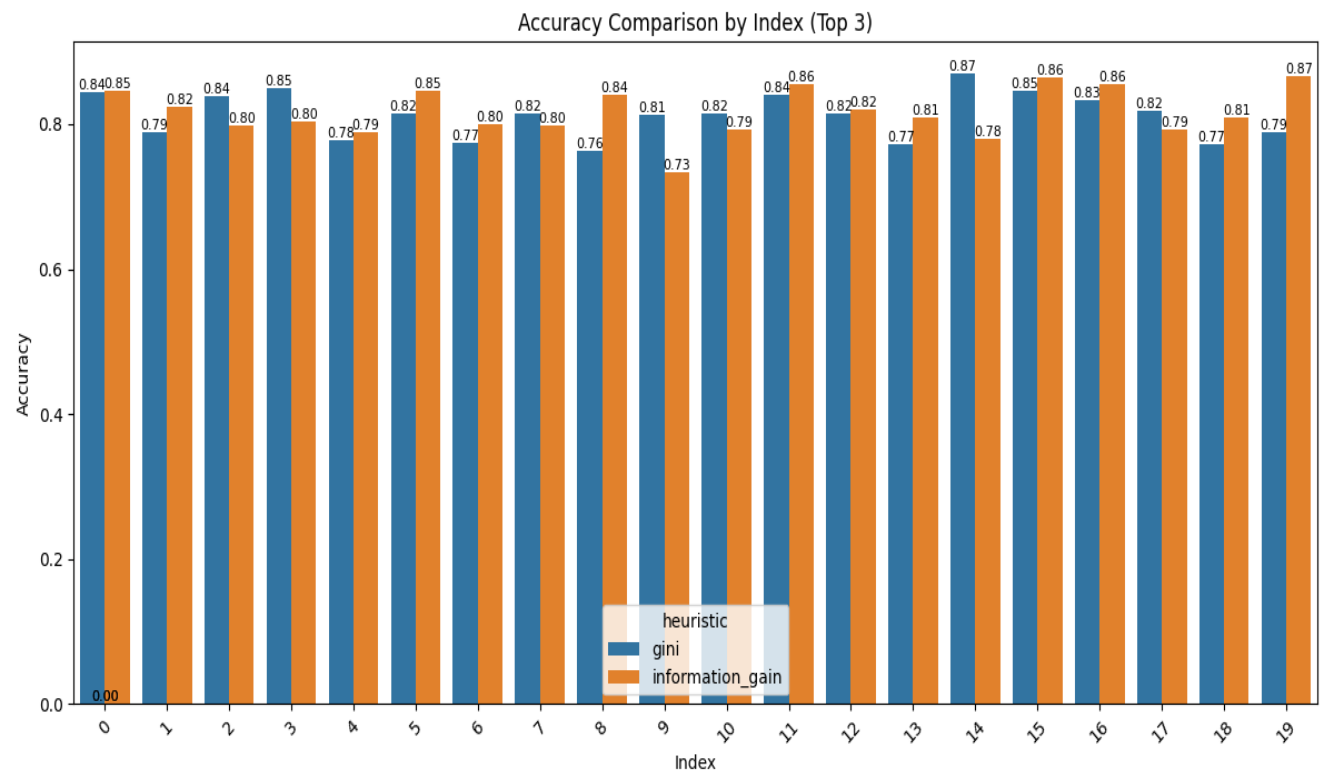
# Training Time Comparison



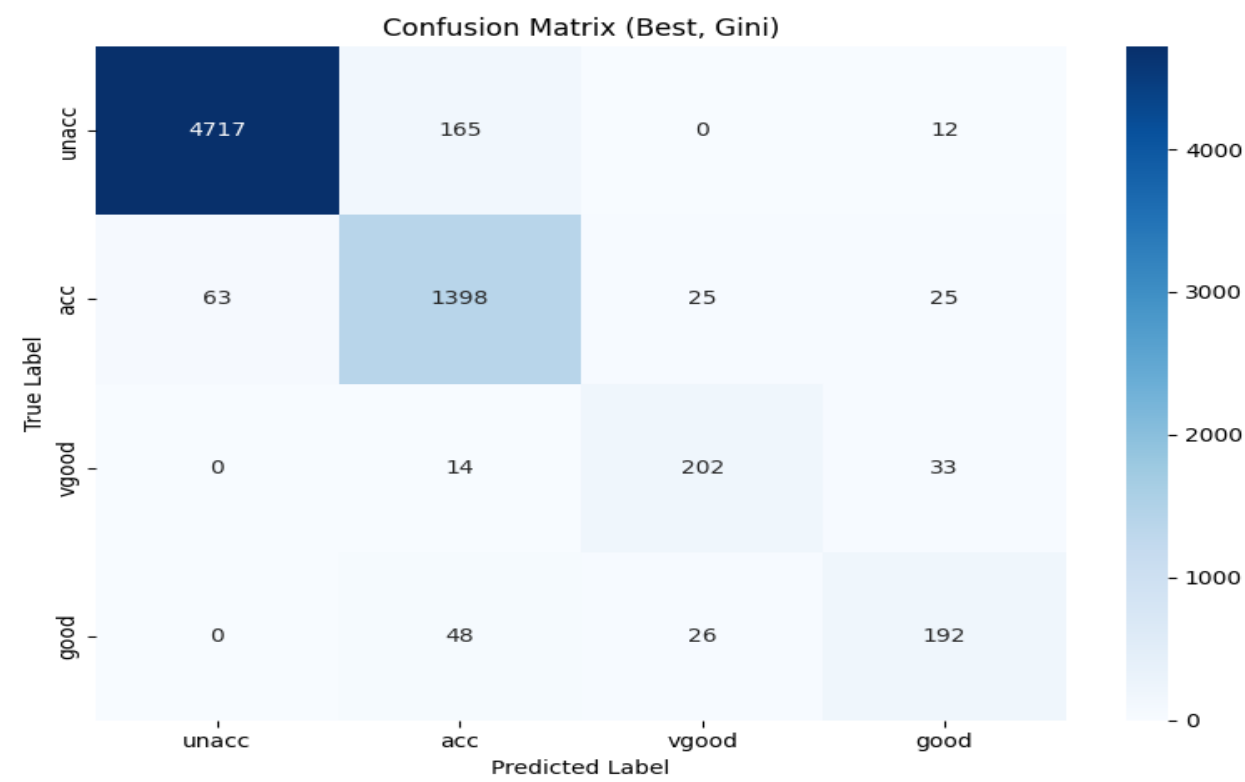
# Accuracy Comparison by Index (Best)



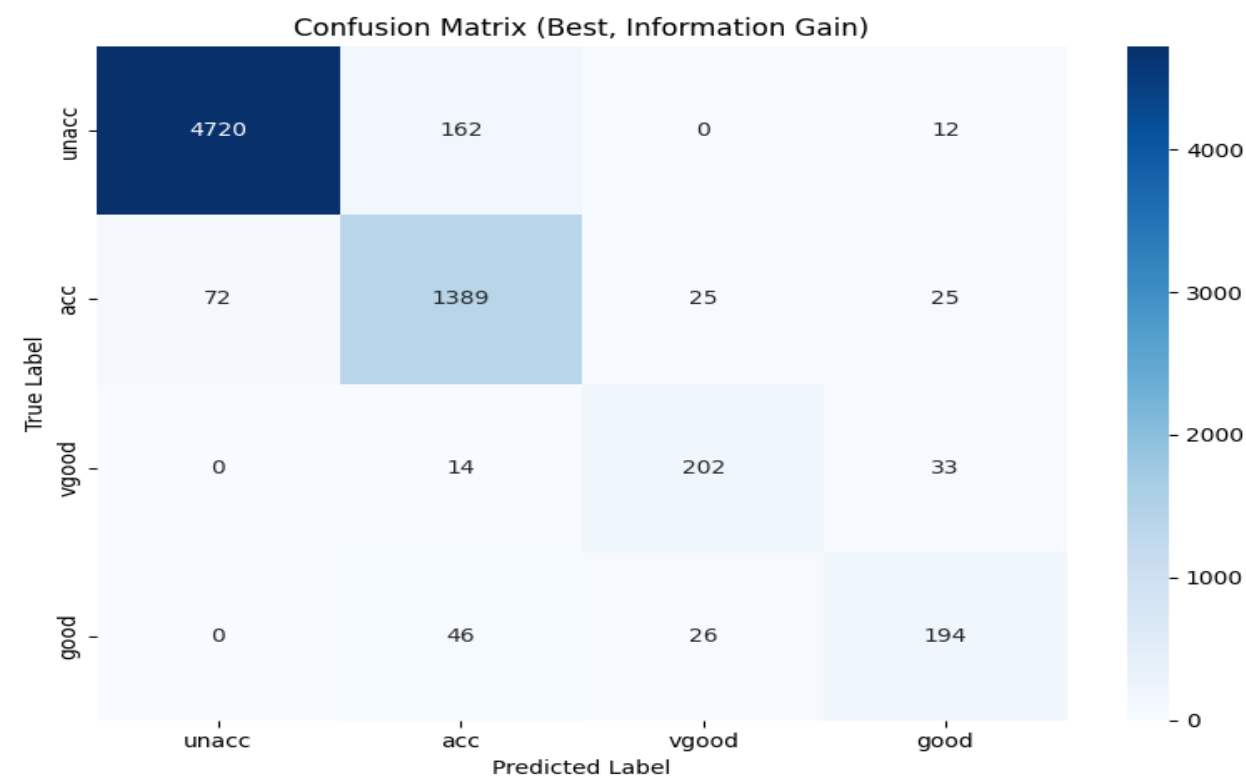
# Accuracy Comparison by Index (Top 3)



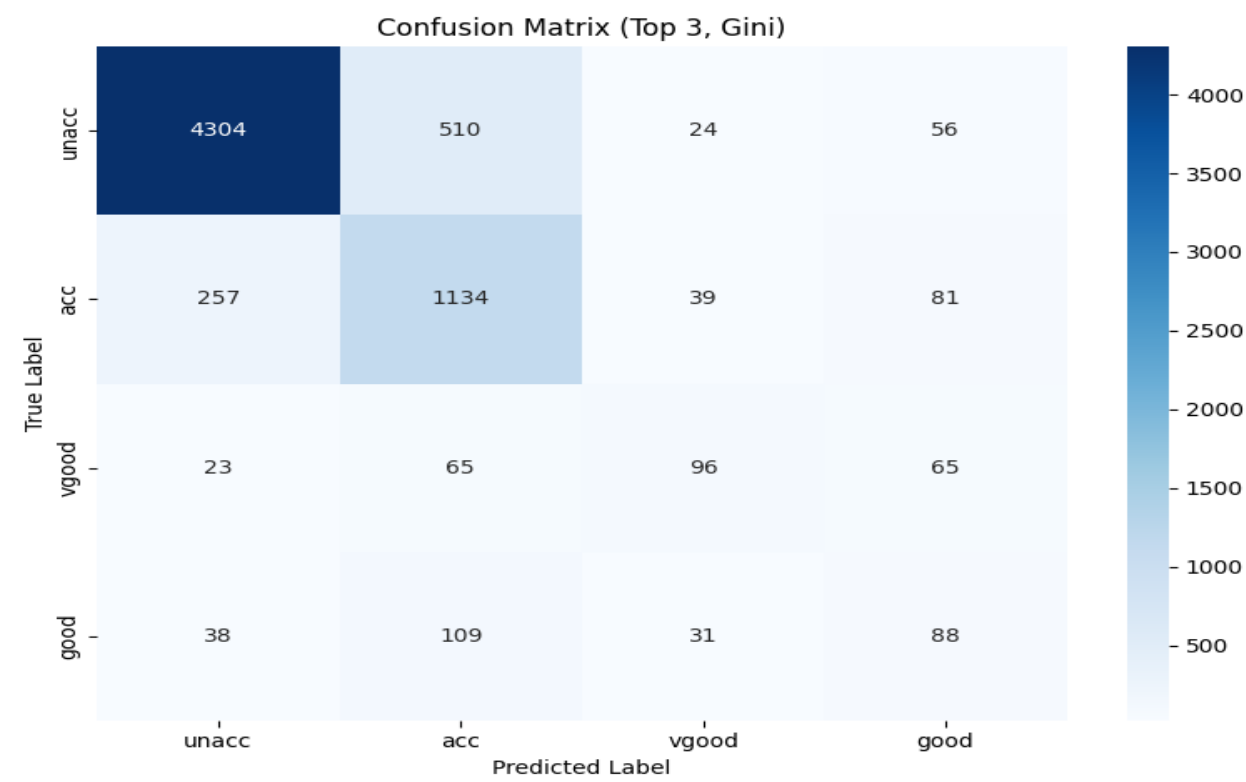
# Confusion Matrix (Best, Gini)



# Confusion Matrix (Best, Information Gain)

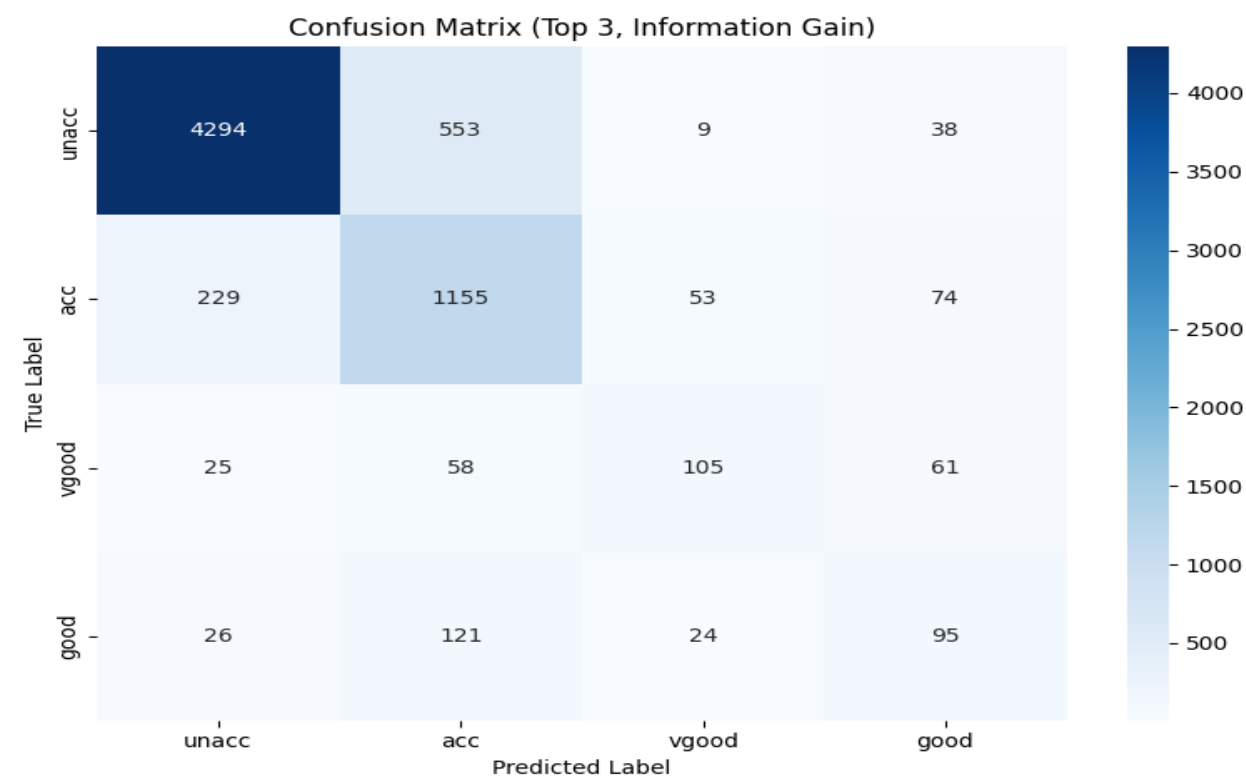


# Confusion Matrix (Top 3, Gini)





# Confusion Matrix (Top 3, Information Gain)



## Classification Report (Best, Gini)

	precision	recall	f1-score	support
acc	0.8603	0.9252	0.8916	1511.0000
good	0.7328	0.7218	0.7273	266.0000
unacc	0.9868	0.9638	0.9752	4894.0000
vgood	0.7984	0.8112	0.8048	249.0000
accuracy	0.9406	0.9406	0.9406	0.9406
macro avg	0.8446	0.8555	0.8497	6920.0000
weighted avg	0.9427	0.9406	0.9413	6920.0000

## Classification Report (Best, Information Gain)

	precision	recall	f1-score	support
acc	0.8622	0.9193	0.8898	1511.0000
good	0.7348	0.7293	0.7321	266.0000
unacc	0.9850	0.9644	0.9746	4894.0000
vgood	0.7984	0.8112	0.8048	249.0000
accuracy	0.9400	0.9400	0.9400	0.9400
macro avg	0.8451	0.8561	0.8503	6920.0000
weighted avg	0.9418	0.9400	0.9407	6920.0000

## Classification Report (Top 3, Gini)

	precision	recall	f1-score	support
acc	0.6238	0.7505	0.6813	1511.0000
good	0.3034	0.3308	0.3165	266.0000
unacc	0.9312	0.8794	0.9046	4894.0000
vgood	0.5053	0.3855	0.4374	249.0000
accuracy	0.8124	0.8124	0.8124	0.8124
macro avg	0.5909	0.5866	0.5849	6920.0000
weighted avg	0.8246	0.8124	0.8164	6920.0000

## Classification Report (Top 3, Information Gain)

	precision	recall	f1-score	support
acc	0.6121	0.7644	0.6798	1511.0000
good	0.3545	0.3571	0.3558	266.0000
unacc	0.9388	0.8774	0.9071	4894.0000
vgood	0.5497	0.4217	0.4773	249.0000
accuracy	0.8163	0.8163	0.8163	0.8163
macro avg	0.6138	0.6052	0.6050	6920.0000
weighted avg	0.8310	0.8163	0.8208	6920.0000