40X			
Model	Feature	Technique	CPU Time
HF + ML	HOG	SGD	53.790682
HF + ML	HOG	Decision Tree	53.792975
HF + ML	HOG	Gradient Boosting	53.803605
HF + ML	HOG	Naive Bayes	53.811082
HF + ML	HOG	Random Forest	53.850264
HF + ML	HOG	Extremely Trees	53.878671
HF + ML	HOG	Adaboost	54.245187
HF + ML	HOG	Linear SVM	57.444243
HF + ML	HOG	SVM	57.634767
HF + ML	HOG	KNN	63.059870
DL + ML (TL)	IV3	SGD	63.2586706
DL + ML (TL)	IV3	Decision Tree	63.2589522
DL + ML (TL)	IV3	Gradient Boosting	63.2607045
DL + ML (TL)	IV3	Naive Bayes	63.2610036
DL + ML (TL)	IV3	Random Forest	63.3070032
DL + ML (TL)	IV3	Extremely Trees	63.3130846
DL + ML (TL)	IV3	Adaboost	63.3180005
DL + ML (TL)	IV3	KNN	63.4519806
DL + ML (TL)	IV3	Linear SVM	63.6620036
DL + ML (TL)	IV3	SVM	64.1039855
DL + ML (TL)	RESNET 152	SGD	74.6224632
DL + ML (TL)	RESNET 152	Decision Tree	74.6229932
DL + ML (TL)	RESNET 152	Naive Bayes	74.6239344
DL + ML (TL)	RESNET 152	Gradient Boosting	74.6254722
DL + ML (TL)	RESNET 152	Random Forest	74.6810432
DL + ML (TL)	RESNET 152	Adaboost	74.6924678
DL + ML (TL)	RESNET 152	Extremely Trees	74.7200236
DL + ML (TL)	RESNET 152	Linear SVM	75.1063427
DL + ML (TL)	RESNET 152	SVM	75.1071233
DL + ML (TL)	RESNET 152	KNN	75.3076901
DL + ML (FT)	IV3	Decision Tree	77.6241892
DL + ML (FT)	IV3	SGD	77.624211
DL + ML (FT)	IV3	Gradient Boosting	77.6256032
DL + ML (FT)	IV3	Naive Bayes	77.6271462
DL + ML (FT)	IV3	Adaboost	77.6806126
DL + ML (FT)	IV3	Random Forest	77.6917111
DL + ML (FT)	IV3	Extremely Trees	77.6920366
DL + ML (FT)	IV3	KNN	77.8591494
DL + ML (FT)	IV3	Linear SVM	77.868383
DL + ML (FT)	IV3	SVM	78.222314
DL + ML (FT)	RESNET 152	SGD	91.2266265
DL + ML (FT)	RESNET 152	Decision Tree	91.2267805
DL + ML (FT)	RESNET 152	Naive Bayes	91.2289362
DL + ML (FT)	RESNET 152	Gradient Boosting	91.2297594
DL + ML (FT)	RESNET 152	Random Forest	91.2759914
DL + ML (FT)	RESNET 152	Extremely Trees	91.2869871
DL + ML (FT)	RESNET 152	Adaboost	91.2958305
DL + ML (FT)	RESNET 152	KNN	91.4565006
DL + ML (FT)	RESNET 152	Linear SVM	91.5243971
DL + ML (FT)	RESNET 152	SVM	91.7211062
HF + ML	LPQ	SGD	120.960852
HF + ML	LPQ	Decision Tree	120.960894
HF + ML	LPQ	Naive Bayes	120.962651
HF + ML	LPQ	Gradient Boosting	120.963036
HF + ML	LPQ	Random Forest	120.996005
HF + ML	LPQ	Extremely Trees	121.005464
HF + ML	LPQ	Adaboost	121.023735
HF + ML	LPQ	Linear SVM	121.187527
HF + ML	LPQ	SVM	121.366775
HF + ML	LPQ	KNN	121.497192
HF + ML	SIFT	SGD	139.392686
HF + ML	SIFT	Decision Tree	139.393012
HF + ML	SIFT	Naive Bayes	139.394838
HF + ML	SIFT	Gradient Boosting	139.395007
HF + ML	SIFT	Random Forest	139.435389
HF + ML	SIFT	Extremely Trees	139.441087
HF + ML	SIFT	Adaboost	139.457503
HF + ML	SIFT	Linear SVM	139.603040
HF + ML	SIFT	SVM	139.729403
HF + ML	SIFT	KNN	140.306748
HF + ML	LBP	Decision Tree	143.389238
HF + ML	LBP	Naive Bayes	143.389294
HF + ML	LBP	SGD	143.389601
HF + ML	LBP	Gradient Boosting	143.390356
HF + ML	LBP	Linear SVM	143.407656
HF + ML	LBP	Adaboost	143.418376
HF + ML	LBP	Random Forest	143.42387
HF + ML	LBP	Extremely Trees	143.431889
HF + ML	LBP	SVM	143.433971
HF + ML	LBP	KNN	143.43423
HF + ML	LBP + LPQ	SGD	264.349399

40X			
Model	Feature	Technique	GPU Time
HF + ML	Haralick	SGD	22.014562
HF + ML	Haralick	Naive Bayes	22.014565
HF + ML	Haralick	Decision Tree	22.014762
HF + ML	Haralick	Gradient Boosting	22.015562
HF + ML	Haralick	Linear SVM	22.019804
HF + ML	Haralick	Adaboost	22.035865
HF + ML	Haralick	KNN	22.044454
HF + ML	Haralick	Extremely Trees	22.045911
HF + ML	Haralick	Random Forest	22.048565
HF + ML	Haralick	SVM	22.057565
HF + ML	HOG	SGD	42.608852
HF + ML	HOG	Decision Tree	42.612352
HF + ML	HOG	Gradient Boosting	42.622237
HF + ML	HOG	Naive Bayes	42.629047
HF + ML	HOG	Random Forest	42.669741
HF + ML	HOG	Extremely Trees	42.697897
HF + ML	HOG	Adaboost	43.060957
DL + ML (TL)	IV3	SGD	44.4243668
DL + ML (TL)	IV3	Decision Tree	44.4244783
DL + ML (TL)	IV3	Naive Bayes	44.4257905
DL + ML (TL)	IV3	Gradient Boosting	44.4261133
DL + ML (TL)	IV3	Random Forest	44.4668422
DL + ML (TL)	IV3	Extremely Trees	44.4772949
DL + ML (TL)	IV3	Adaboost	44.4795152
DL + ML (TL)	IV3	KNN	44.5470707
DL + ML (TL)	IV3	Linear SVM	44.8396251
DL + ML (TL)	IV3	SVM	44.9628635
HF + ML	HOG	SVM	46.061957
HF + ML	HOG	Linear SVM	46.262852
HF + ML	HOG	KNN	49.825909
DL + ML (TL)	RESNET 152	SGD	50.657991
DL + ML (TL)	RESNET 152	Decision Tree	50.658274
DL + ML (TL)	RESNET 152	Naive Bayes	50.6598499
DL + ML (TL)	RESNET 152	Gradient Boosting	50.6605329
DL + ML (TL)	RESNET 152	Random Forest	50.7064583
DL + ML (TL)	RESNET 152	Extremely Trees	50.718916
DL + ML (TL)	RESNET 152	Adaboost	50.7272289
DL + ML (TL)	RESNET 152	Linear SVM	50.8848801
DL + ML (TL)	RESNET 152	SVM	51.0300788
DL + ML (TL)	RESNET 152	KNN	51.1526342
DL + ML (FT)	IV3	SGD	52.4752718
DL + ML (FT)	IV3	Decision Tree	52.4753995
DL + ML (FT)	IV3	Naive Bayes	52.4771305
DL + ML (FT)	IV3	Gradient Boosting	52.4779813
DL + ML (FT)	IV3	Random Forest	52.524928
DL + ML (FT)	IV3	Extremely Trees	52.5364879
DL + ML (FT)	IV3	Adaboost	52.5413023
DL + ML (FT)	IV3	KNN	52.6707805
DL + ML (FT)	IV3	Linear SVM	52.6908275
DL + ML (FT)	IV3	SVM	52.9053607
DL + ML (FT)	RESNET 152	SGD	67.2366011
DL + ML (FT)	RESNET 152	Decision Tree	67.2367274
DL + ML (FT)	RESNET 152	Naive Bayes	67.238307
DL + ML (FT)	RESNET 152	Gradient Boosting	67.2393185
DL + ML (FT)	RESNET 152	Random Forest	67.2884074
DL + ML (FT)	RESNET 152	Extremely Trees	67.296964
DL + ML (FT)	RESNET 152	Adaboost	67.2997586
DL + ML (FT)	RESNET 152	KNN	67.4171175
DL + ML (FT)	RESNET 152	Linear SVM	67.4637834
DL + ML (FT)	RESNET 152	SVM	67.6803358
HF + ML	LPQ	SGD	89.1961301
HF + ML	LPQ	Decision Tree	89.196652
HF + ML	LPQ	Naive Bayes	89.1980765
HF + ML	LPQ	Gradient Boosting	89.1986944
HF + ML	LPQ	Random Forest	89.231693
HF + ML	LPQ	Extremely Trees	89.2369245
HF + ML	LPQ	Adaboost	89.2594865
HF + ML	LPQ	Linear SVM	89.4202045
HF + ML	LPQ	SVM	89.5956944
HF + ML	LPQ	KNN	89.6521035
HF + ML	LBP	Decision Tree	121.877688
HF + ML	LBP	Naive Bayes	121.877750
HF + ML	LBP	SGD	121.878002
HF + ML	LBP	Gradient Boosting	121.878702
HF + ML	LBP	Linear SVM	121.882812
HF + ML	LBP	Adaboost	121.898612
HF + ML	LBP	Random Forest	121.907711
HF + ML	LBP	KNN	121.917703
HF + ML	LBP	Extremely Trees	121.917822
HF + ML	LBP	SVM	121.919712
HF + ML	LBP + LPQ	SGD	211.073365

Category	Feature	Classifier	Value
HF + ML	LBP + LPQ	Decision Tree	264.349669
HF + ML	LBP + LPQ	Naive Bayes	264.351833
HF + ML	LBP + LPQ	Gradient Boosting	264.351846
HF + ML	LBP + LPQ	Random Forest	264.385854
HF + ML	LBP + LPQ	Extremely Trees	264.393777
HF + ML	LBP + LPQ	Adaboost	264.422003
HF + ML	LBP + LPQ	Linear SVM	264.508712
HF + ML	LBP + LPQ	SVM	264.735884
HF + ML	LBP + LPQ	KNN	264.767551
DL	Xception	LSTM	482.246409
HF + ML	Haralick	Decision Tree	528.329990
HF + ML	Haralick	SGD	528.330021
HF + ML	Haralick	Naive Bayes	528.330033
HF + ML	Haralick	Gradient Boosting	528.331124
HF + ML	Haralick	Adaboost	528.354130
HF + ML	Haralick	Linear SVM	528.356877
HF + ML	Haralick	KNN	528.364690
HF + ML	Haralick	Random Forest	528.368216
HF + ML	Haralick	Extremely Trees	528.380074
HF + ML	Haralick	SVM	528.389451
HF + ML	LBP + LPQ + GLCM	SGD	792.679097
HF + ML	LBP + LPQ + GLCM	Decision Tree	792.679274
HF + ML	LBP + LPQ + GLCM	Naive Bayes	792.681300
HF + ML	LBP + LPQ + GLCM	Gradient Boosting	792.681607
HF + ML	LBP + LPQ + GLCM	Random Forest	792.714568
HF + ML	LBP + LPQ + GLCM	Extremely Trees	792.722525
HF + ML	LBP + LPQ + GLCM	Adaboost	792.749908
HF + ML	LBP + LPQ + GLCM	Linear SVM	792.828665
HF + ML	LBP + LPQ + GLCM	KNN	793.069916
HF + ML	LBP + LPQ + GLCM	SVM	793.080465
DL + ML (FT)	VGG 19	SGD	855.696395
DL + ML (FT)	VGG 19	Decision Tree	855.696543
DL + ML (FT)	VGG 19	Naive Bayes	855.698908
DL + ML (FT)	VGG 19	Gradient Boosting	855.699528
DL + ML (FT)	VGG 19	Random Forest	855.745053
DL + ML (FT)	VGG 19	Extremely Trees	855.763953
DL + ML (FT)	VGG 19	Adaboost	855.770089
DL + ML (FT)	VGG 19	Linear SVM	855.825589
DL + ML (FT)	VGG 19	KNN	856.041138
DL + ML (FT)	VGG 19	SVM	856.194353
DL + ML (FT)	VGG 19 + RESNET 152	SGD	946.922436
DL + ML (FT)	VGG 19 + RESNET 152	Decision Tree	946.923881
DL + ML (FT)	VGG 19 + RESNET 152	Gradient Boosting	946.925684
DL + ML (FT)	VGG 19 + RESNET 152	Naive Bayes	946.928638
DL + ML (FT)	VGG 19 + RESNET 152	Random Forest	946.971081
DL + ML (FT)	VGG 19 + RESNET 152	Extremely Trees	946.989926
DL + ML (FT)	VGG 19 + RESNET 152	Adaboost	947.047074
DL + ML (FT)	VGG 19 + RESNET 152	Linear SVM	947.217077
DL + ML (FT)	VGG 19 + RESNET 152	KNN	947.454184
DL + ML (FT)	VGG 19 + RESNET 152	SVM	947.89905
DL + ML (TL)	VGG 19	Decision Tree	1018.3266
DL + ML (TL)	VGG 19	SGD	1018.32696
DL + ML (TL)	VGG 19	Gradient Boosting	1018.32962
DL + ML (TL)	VGG 19	Naive Bayes	1018.33061
DL + ML (TL)	VGG 19	Random Forest	1018.38221
DL + ML (TL)	VGG 19	Extremely Trees	1018.3918
DL + ML (TL)	VGG 19	Adaboost	1018.4042
DL + ML (TL)	VGG 19	KNN	1018.44106
DL + ML (TL)	VGG 19	Linear SVM	1018.4822
DL + ML (TL)	VGG 19	SVM	1018.81031
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	SGD	1024.54647
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Decision Tree	1024.548
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Naive Bayes	1024.55287
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Gradient Boosting	1024.55502
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Random Forest	1024.61376
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Extremely Trees	1024.63456
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Adaboost	1024.6499
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Linear SVM	1024.87
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	KNN	1025.53124
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	SVM	1026.28923
DL + ML (TL)	VGG 19 + RESNET 152	SGD	1092.94843
DL + ML (TL)	VGG 19 + RESNET 152	Gradient Boosting	1092.95111
DL + ML (TL)	VGG 19 + RESNET 152	Decision Tree	1092.95178
DL + ML (TL)	VGG 19 + RESNET 152	Naive Bayes	1092.95311
DL + ML (TL)	VGG 19 + RESNET 152	Random Forest	1092.99268
DL + ML (TL)	VGG 19 + RESNET 152	Extremely Trees	1093.01617
DL + ML (TL)	VGG 19 + RESNET 152	Adaboost	1093.02568
DL + ML (TL)	VGG 19 + RESNET 152	Linear SVM	1093.39873
DL + ML (TL)	VGG 19 + RESNET 152	SVM	1093.70176
DL + ML (TL)	VGG 19 + RESNET 152	KNN	1095.27368
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	SGD	1156.20618
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Decision Tree	1156.20677
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Naive Bayes	1156.21066

Category	Feature	Classifier	Value
HF + ML	LBP + LPQ	Decision Tree	211.073788
HF + ML	LBP + LPQ	Gradient Boosting	211.075470
HF + ML	LBP + LPQ	Naive Bayes	211.075694
HF + ML	LBP + LPQ	Extremely Trees	211.096065
HF + ML	LBP + LPQ	Random Forest	211.101858
HF + ML	LBP + LPQ	Adaboost	211.141858
HF + ML	LBP + LPQ	Linear SVM	211.218551
HF + ML	LBP + LPQ	SVM	211.418558
HF + ML	LBP + LPQ	KNN	211.454470
HF + ML	LBP + LPQ + GLCM	SGD	233.087974
HF + ML	LBP + LPQ + GLCM	Decision Tree	233.088580
HF + ML	LBP + LPQ + GLCM	Gradient Boosting	233.089415
HF + ML	LBP + LPQ + GLCM	Naive Bayes	233.090324
HF + ML	LBP + LPQ + GLCM	Extremely Trees	233.110380
HF + ML	LBP + LPQ + GLCM	Random Forest	233.115774
HF + ML	LBP + LPQ + GLCM	Adaboost	233.166205
HF + ML	LBP + LPQ + GLCM	Linear SVM	233.231415
HF + ML	LBP + LPQ + GLCM	SVM	233.393805
HF + ML	LBP + LPQ + GLCM	KNN	233.465715
DL	Xception	LSTM	470.745466
DL + ML (FT)	VGG 19	SGD	528.772925
DL + ML (FT)	VGG 19	Decision Tree	528.773104
DL + ML (FT)	VGG 19	Naive Bayes	528.774974
DL + ML (FT)	VGG 19	Gradient Boosting	528.775653
DL + ML (FT)	VGG 19	Random Forest	528.818747
DL + ML (FT)	VGG 19	Extremely Trees	528.829247
DL + ML (FT)	VGG 19	Adaboost	528.837234
DL + ML (FT)	VGG 19	Linear SVM	528.919538
DL + ML (FT)	VGG 19	KNN	529.040095
DL + ML (FT)	VGG 19	SVM	529.19874
DL + ML (FT)	VGG 19 + RESNET 152	SGD	596.009066
DL + ML (FT)	VGG 19 + RESNET 152	Decision Tree	596.009641
DL + ML (FT)	VGG 19 + RESNET 152	Naive Bayes	596.012235
DL + ML (FT)	VGG 19 + RESNET 152	Gradient Boosting	596.012536
DL + ML (FT)	VGG 19 + RESNET 152	Random Forest	596.055229
DL + ML (FT)	VGG 19 + RESNET 152	Extremely Trees	596.06447
DL + ML (FT)	VGG 19 + RESNET 152	Adaboost	596.109328
DL + ML (FT)	VGG 19 + RESNET 152	Linear SVM	596.261376
DL + ML (FT)	VGG 19 + RESNET 152	KNN	596.496106
DL + ML (FT)	VGG 19 + RESNET 152	SVM	596.879083
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	SGD	648.484062
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Decision Tree	648.48495
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Naive Bayes	648.489191
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Gradient Boosting	648.489853
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Random Forest	648.528275
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Extremely Trees	648.535981
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Adaboost	648.616793
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	Linear SVM	648.79019
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	KNN	649.241055
DL + ML (FT)	VGG 19 + RESNET 152 + IV3	SVM	649.762156
HF + ML	SIFT	SGD	717.550267
HF + ML	SIFT	Decision Tree	717.550269
HF + ML	SIFT	Naive Bayes	717.552258
HF + ML	SIFT	Gradient Boosting	717.552269
HF + ML	SIFT	Random Forest	717.561919
HF + ML	SIFT	Extremely Trees	717.594358
HF + ML	SIFT	Adaboost	717.625458
HF + ML	SIFT	Linear SVM	717.760267
HF + ML	SIFT	SVM	717.871028
HF + ML	SIFT	KNN	718.195458
DL + ML (TL)	VGG 19	SGD	779.299445
DL + ML (TL)	VGG 19	Decision Tree	779.299594
DL + ML (TL)	VGG 19	Naive Bayes	779.301189
DL + ML (TL)	VGG 19	Gradient Boosting	779.301831
DL + ML (TL)	VGG 19	Random Forest	779.344871
DL + ML (TL)	VGG 19	Extremely Trees	779.358412
DL + ML (TL)	VGG 19	Adaboost	779.365323
DL + ML (TL)	VGG 19	Linear SVM	779.399631
DL + ML (TL)	VGG 19	SVM	779.679924
DL + ML (TL)	VGG 19	KNN	780.119499
DL + ML (TL)	VGG 19 + RESNET 152	SGD	829.956808
DL + ML (TL)	VGG 19 + RESNET 152	Decision Tree	829.957264
DL + ML (TL)	VGG 19 + RESNET 152	Naive Bayes	829.959579
DL + ML (TL)	VGG 19 + RESNET 152	Gradient Boosting	829.960309
DL + ML (TL)	VGG 19 + RESNET 152	Random Forest	829.989666
DL + ML (TL)	VGG 19 + RESNET 152	Extremely Trees	829.998758
DL + ML (TL)	VGG 19 + RESNET 152	Adaboost	830.038974
DL + ML (TL)	VGG 19 + RESNET 152	Linear SVM	830.185481
DL + ML (TL)	VGG 19 + RESNET 152	SVM	830.563787
DL + ML (TL)	VGG 19 + RESNET 152	KNN	831.544629
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	SGD	874.380528
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Decision Tree	874.381189
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Naive Bayes	874.384526

DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Gradient Boosting	1156.21114
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Random Forest	1156.24687
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Extremely Trees	1156.26252
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Adaboost	1156.30514
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Linear SVM	1156.58255
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	SVM	1157.00454
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	KNN	1159.08987
DL		ResNet 152	29352.1486

DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Gradient Boosting	874.384952
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Random Forest	874.414454
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Extremely Trees	874.430089
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Adaboost	874.495166
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	Linear SVM	874.713991
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	SVM	875.13043
DL + ML (TL)	VGG 19 + RESNET 152 + IV3	KNN	876.759505
DL		ResNet 152	9051.44