

Laboratory Field Comparison

Grid	Device	Environment	Sample Size	Classifier	Mean Accuracy	Accuracy STD	Mean Kappa	Kappa STD	ratio_index	ratio_sitting	ratio_standing	ratio_thumb	
0	(2, 2)	iPhone 6	True	674	SVC(C=8, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.000244140625, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.7893237719274141	0.04995206798713887	0.7191170528162798	0.06659407440644427	0.5039281705948373	0.4927048260381594	0.5072951739618407	0.4960718294051628
1	(2, 2)	iPhone 6	False	674	SVC(C=32, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.0009765625, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.7069355341708989	0.06199558443322769	0.6090567151793655	0.08272526068636986	0.4885844748858447	0.7317351598173516	0.2682648401826484	0.5114155251141552
2	(4, 3)	iPhone 6	True	2066	SVC(C=32, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.000244140625, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.459492516835635	0.0590633202626591	0.41030298296132817	0.06437132008655942	0.4983400959055699	0.5031353744005902	0.4968646255994098	0.5016599040944301
3	(4, 3)	iPhone 6	False	2066	SVC(C=8, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.001953125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3975098094462521	0.030402507525282174	0.34275186287857473	0.03314680212361573	0.4857357357357358	0.7364864864864865	0.2635135135135135	0.5142642642642643
4	(5, 4)	iPhone 6	True	3403	MLPClassifier(activation='relu', alpha=0.001, batch_size='auto', beta_1=0.9, beta_2=0.999, early_stopping=False, epsilon=1e-08, hidden_layer_sizes=(8), learning_rate='constant', learning_rate_init=0.001, max_iter=10000, momentum=0.9, nesterovs_momentum=True, power_t=0.5, random_state=None, shuffle=True, solver='adam', tol=0.0001, validation_fraction=0.1, verbose=False, warm_start=False)	0.3473751552649916	0.046858526838929694	0.3130178852513626	0.04932371151705335	0.501113089937667	0.4979964381121994	0.5020035618878005	0.49886910062333
5	(5, 4)	iPhone 6	False	3403	MLPClassifier(activation='relu', alpha=0.001, batch_size='auto', beta_1=0.9, beta_2=0.999, early_stopping=False, epsilon=1e-08, hidden_layer_sizes=(8), learning_rate='constant', learning_rate_init=0.001, max_iter=10000, momentum=0.9, nesterovs_momentum=True, power_t=0.5, random_state=None, shuffle=True, solver='adam', tol=0.0001, validation_fraction=0.1, verbose=False, warm_start=False)	0.28329273945376016	0.037022592639406084	0.245552655656503846	0.03894952413295842	0.4817767653758542	0.7343963553530751	0.2656036446469248	0.5182232346241458
15	(4, 3)	iPhone 6s	True	287	MLPClassifier(activation='relu', alpha=0.0001, batch_size='auto', beta_1=0.9, beta_2=0.999, early_stopping=False, epsilon=1e-08, hidden_layer_sizes=(8), learning_rate='constant', learning_rate_init=0.001, max_iter=10000, momentum=0.9, nesterovs_momentum=True, power_t=0.5, random_state=None, shuffle=True, solver='adam', tol=0.0001, validation_fraction=0.1, verbose=False, warm_start=False)	0.4279788765388557	0.07247825789844138	0.3759930378385323	0.07905123238563586	0.31922955478370696	0.7590779917903379	0.2409220082096621	0.680770445216293
14	(4, 3)	iPhone 6s	False	287	SVC(C=4, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.0009765625, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5680145931702097	0.05617115018378952	0.5287595547578221	0.061263079747891164	0.5012594458438288	0.5003148614609572	0.4996851385390429	0.4987405541561713
13	(2, 2)	iPhone 6s	True	859	MLPClassifier(activation='relu', alpha=0.0001, batch_size='auto', beta_1=0.9, beta_2=0.999, early_stopping=False, epsilon=1e-08, hidden_layer_sizes=(8), learning_rate='constant', learning_rate_init=0.001, max_iter=10000, momentum=0.9, nesterovs_momentum=True, power_t=0.5, random_state=None, shuffle=True, solver='adam', tol=0.0001, validation_fraction=0.1, verbose=False, warm_start=False)	0.6793879680030309	0.08858258654637692	0.5723782475715515	0.1181495175914203	0.3170028818443804	0.7531219980787704	0.2468780019212296	0.6829971181556196
12	(2, 2)	iPhone 6s	False	859	SVC(C=64, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.001953125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.854592143590762	0.055489916858969375	0.8061258269201433	0.07400565386574398	0.5028571428571429	0.5	0.5	0.4971428571428572
17	(5, 4)	iPhone 6s	True	1432	MLPClassifier(activation='relu', alpha=0.0001, batch_size='auto', beta_1=0.9, beta_2=0.999, early_stopping=False, epsilon=1e-08, hidden_layer_sizes=(8), learning_rate='constant', learning_rate_init=0.001, max_iter=10000, momentum=0.9, nesterovs_momentum=True, power_t=0.5, random_state=None, shuffle=True, solver='adam', tol=0.0001, validation_fraction=0.1, verbose=False, warm_start=False)	0.30672963436022405	0.05752235651769441	0.27019799520713145	0.06059013413582241	0.3195266272189349	0.7575873258255392	0.2424126741744608	0.6804733727810651
16	(5, 4)	iPhone 6s	False	1432	SVC(C=8, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.001953125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.4185405876908631	0.04984086969775591	0.3879108350593651	0.05247428595701641	0.5008537279453614	0.5002845759817871	0.4997154240182128	0.4991462720546386
11	(5, 4)	iPhone 7	True	777	SVC(C=4, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.0009765625, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3176316526280808	0.0756708002459489	0.28168617259019924	0.07967305061938533	0.3668195081283868	0.8999583159649854	0.1000416840350146	0.6331804918716132
9	(4, 3)	iPhone 7	False	777	SVC(C=32, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.0001220703125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.4667957390352443	0.07970017425775612	0.4182895121622461	0.08700939609221156	0.3645251396648045	0.8994413407821229	0.1005586592178771	0.6354748603351955

Grid	Device	Environment	Sample Size	Classifier	Mean Accuracy	Accuracy STD	Mean Kappa	Kappa STD	ratio_index	ratio_sitting	ratio_standing	ratio_thumb	
7	(2, 2)	iPhone 7	True	2352	SVC(C=32, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.0001220703125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.7642045454545455	0.09342805141931956	0.6856060606060607	0.1245707352257594	0.3634453781512605	0.8991596638655462	0.10084033613445377	0.6365546218487395
6	(2, 2)	iPhone 7	False	2352	SVC(C=8, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.0009765625, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.8729980822116081	0.07537586457156993	0.8306543777515294	0.10049574389918356	0.5	0.4979166666666667	0.5020833333333333	0.5
10	(5, 4)	iPhone 7	True	3905	SVC(C=2, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.001953125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.4346901823050677	0.09061917332256718	0.40493458006404337	0.09539603296494548	0.500418410041841	0.498744769874477	0.501255230125523	0.49958158995815904
8	(4, 3)	iPhone 7	False	3905	SVC(C=2, cache_size=200, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma=0.001953125, kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5911476496006075	0.10545764900531608	0.5539430655507246	0.11506965041277308	0.5013966480446927	0.4993016759776536	0.5006983240223464	0.4986033519553073