CV Result tables

Matt Ryan

2024-04-29

Table 1: Five-fold cross validation results for each model and modelling scenario. Values are given as mean (standard error).

	ROC AUC	Precision	Recall	Accuracy	F1
Mandate-face_mask					
Logistic Regression	0.837 (0.002)	0.876 (0.001)	$0.783\ (0.002)$	0.77(0.001)	0.827(0.001)
Classification Tree	$0.866 \ (0.003)$	0.892(0.002)	0.84(0.007)	0.816 (0.004)	0.865 (0.004)
XGBoost	0.896 (0.002)	0.895 (0.002)	$0.891\ (0.002)$	0.85 (0.003)	0.893(0.002)
Random Forest	$0.888 \; (0.002)$	0.89 (0.002)	0.89 (0.002)	$0.845 \ (0.002)$	0.89(0.002)
Mandate-other					
Logistic Regression	0.78 (0.003)	0.859 (0.003)	$0.736\ (0.002)$	0.722(0.002)	0.793(0.002)
Classification Tree	0.798 (0.002)	0.879(0.002)	0.69 (0.007)	$0.708 \; (0.005)$	0.773 (0.005)
XGBoost	0.845 (0.002)	0.885 (0.002)	$0.783\ (0.002)$	0.77(0.001)	$0.831\ (0.001)$
Random Forest	$0.836 \ (0.002)$	$0.854\ (0.001)$	$0.853 \ (0.002)$	$0.789\ (0.001)$	$0.854 \ (0.001)$
Pre-mandate-face_mask					
Logistic Regression	0.824 (0.004)	0.479(0.003)	0.769(0.011)	0.727(0.002)	0.59 (0.005)
Classification Tree	0.811 (0.004)	$0.486\ (0.005)$	0.753(0.012)	0.733(0.004)	0.591 (0.003)
XGBoost	$0.861\ (0.001)$	0.549(0.004)	$0.754\ (0.006)$	0.778(0.002)	0.635 (0.004)
Random Forest	$0.858 \; (0.002)$	$0.657 \ (0.007)$	$0.576 \ (0.007)$	$0.814\ (0.003)$	$0.614 \ (0.006)$
Pre-mandate-other					
Logistic Regression	0.777(0.005)	$0.438 \; (0.006)$	$0.734\ (0.008)$	$0.691\ (0.005)$	0.549 (0.006)
Classification Tree	0.779(0.004)	$0.451 \ (0.005)$	0.737(0.011)	$0.704\ (0.004)$	0.56(0.007)
XGBoost	$0.834\ (0.002)$	0.522(0.005)	0.725(0.007)	0.76(0.004)	0.607(0.005)
Random Forest	$0.829\ (0.004)$	$0.595 \ (0.007)$	$0.584\ (0.005)$	$0.792\ (0.003)$	$0.59 \ (0.005)$