

# Machine Learning Models Result (CarPassenger category)

Models	Methods	Accuracy	Accuracy Std Dev	Precision	Precision Std Dev	Recall	Recall Std Dev	F1- score	F1- score Std Dev	Entrop y	Entroy Std Dev
Logistic Regression	Simple	0.98	0.00	0.77	0.08	0.53	0.12	0.63	0.10	0.032	0.002
Logistic Regression	After Calibration	0.98	0.00	0.50	0.04	93	0.04	0.65	0.04	0.023	0.00
Logistic Regression	After ClusterCentroids	0.78	0.04	0.07	0.01	0.99	0.02	0.13	0.02	0.35	0.01
Logistic Regression	After TomekLinks	0.98	0.00	0.73	0.067	0.55	0.11	0.62	0.08	0.03	0.00
Logistic Regression	After RandomUnderSampler	0.92	0.00	0.18	0.01	985	0.02	0.31	0.01	0.19	0.00
Logistic Regression	After SMOTE	0.96	0.00	0.301	0.04	0.885	0.04	0.44	0.051	0.05	0.00
Logistic Regression	After ADASYN	0.961	0.00	0.29	0.03	0.88	0.03	0.44	0.058	0.007	0.00
Logistic Regression	After RandomOverSampling	0.96	0.00	0.32	0.03	0.97	0.02	0.48	0.04	0.05	0.00
XGBoost	Simple	0.98	0.00	0.69	0.07	64	0.08	0.66	0.07	0.019	0.00
XGBoost	After Calibration	0.98	0.00	0.482	0.03	0.945	0.03	0.63	0.03	0.02	0.00
XGBoost	After ClusterCentroids	0.88	0.04	0.14	0.04	0.99	0.020	0.24	0.06	0.14	0.02
XGBoost	After TomekLinks	0.98	0.00	0.683	0.08	0.6	0.10	0.63	0.08	0.01	0.00

XGBoost	After RandomUnderSampler	0.96	0.00	0.35	0.05	0.975	0.02	0.51	0.06	0.076	0.009
XGBoost	After SMOTE	0.97	0.00	0.39	0.05	0.825	0.10	0.53	0.07	0.02	0.00
XGBoost	After ADASYN	0.973	0.00	0.38	0.06	0.82	0.107	0.518	0.07	0.024	0.0
XGBoost	After RandomOverSampling	0.98	0.00	0.55	0.04	0.775	0.11	0.64	0.06	0.01	0.00
SVM	Simple	0.99	0.00	0.79	0.07	0.51	0.10	62	0.08	0.03	0.00
SVM	After Calibration	0.98	0.00	0.64	0.04	0.72	0.06	0.68	0.04	0.04	0.00
SVM	After ClusterCentroids	0.67	0.12	0.05	0.01	0.99	0.01	0.10	0.02	0.479	0.019
SVM	After TomekLinks	0.98	0.00	0.793	0.07	0.514	0.10	0.619	0.08	0.03	0.00
SVM	After RandomUnderSampler	0.94	0.00	0.227	0.03	0.985	0.02	0.368	0.04	0.10	0.00
SVM	After SMOTE	0.97	0.00	0.33	0.04	0.73	0.11	0.46	0.05	0.01	0.00
SVM	After ADASYN	0.97	0.00	0.34	0.05	0.73	0.11	0.46	0.06	0.01	0.00
SVM  Ta inja agha amin	After RandomOverSampling	0.981	0.00	0.48	0.04	0.92	0.055	0.632	0.04	0.005	0.00
Random Forest	Simple	0.98	0.00	70	0.09	: 0.51	0.15	0.58	0.13	0.02	0.00
Random Forest	After Calibration	0.98	0.00	0.54	0.06	0.80	0.09	0.64	0.07	0.03	0.00
Random Forest	After ClusterCentroids	0.93	0.01	0.20	0.02	0.985	0.0	0.33	0.03	0.35	0.020
Random Forest	After TomekLinks	0.98	0.00	0.712	0.11	0.51	0.11	0.59	0.11	0.026	0.00

Random Forest	After RandomUnderSampler	0.95	0.00	0.26	0.03	0.97	0.02	0.41	0.04	0.16	0.00
Random Forest	After SMOTE	0.98	0.00	0.416	0.05	0.875	0.09	0.56	0.06	0.02	0.00
Random Forest	After ADASYN	0.97	0.00	0.41	0.05	0.85	0.09	0.55	0.06	0.02	0.00
Random Forest	After RandomOverSampling	0.98	0.00	0.66	0.08	0.59	0.11	0.62	0.09	0.02	0.00
Decision Tree	Simple	0.98	0.00	0.59	0.09	0.55	0.09	0.57	0.09	0.00	0.00
Decision Tree	After Calibration	0.98	0.00	0.63	0.09	0.50	0.12	0.56	0.11	0.058	0.00
Decision Tree	After ClusterCentroids	0.85	0.05	0.12	0.04	0.985	0.02	0.21	0.07	0.00	0.00
Decision Tree	After TomekLinks	0.98	0.00	0.57	0.11	0.555	0.13	0.56	0.12	0.0001	0.0003
Decision Tree	After RandomUnderSampler	0.93	0.01	0.21	0.03	0.94	0.03	0.34	0.05	0.00	0.00
Decision Tree	After SMOTE	0.97	0	0.39	0.04	0.84	0.07	0.53	0.05	0.00	0.00
Decision Tree	After ADASYN	0.97	0.003	0.38	0.04	0.83	0.06	0.52	0.05	0.00	0.00
Decision Tree	After RandomOverSampling	0.98	0.00	0.60	0.09	0.53	0.11	0.56	0.10	0	0
DBC		0.97	0.05	0.71	0.31	0.95	0.06	77	0.27	0.01	0.01