

	Model	TRAINING SET					TESTING SET				
		Recall	Precision	F1 - Score	Accuracy	AUC	Recall	Precision	F1 - Score	Accuracy	AUC
IMBALANCED DATA											
ORIGINAL DATA	Logistic Regression	0.6397	0.8688	0.7368	0.9992	0.8198	0.5556	0.9091	0.6897	0.9992	0.7777
	Naïve Bayes	0.8277	0.0604	0.1125	0.9780	0.9030	0.7778	0.0523	0.0980	0.9773	0.8777
	KNN	0.7990	0.9533	0.8693	0.9996	0.8994	0.7000	0.9692	0.8129	0.9995	0.8500
	Decision Tree	1.0000	1.0000	1.0000	1.0000	1.0000	0.6889	0.7561	0.7209	0.9992	0.8443
	Random Forest	0.9530	1.0000	0.9759	0.9999	0.9765	0.6556	0.9672	0.7815	0.9994	0.8278
	AdaBoost	0.7206	0.8166	0.7656	0.9993	0.8602	0.7222	0.8442	0.7784	0.9993	0.8610
	XGBoost	1.0000	1.0000	1.0000	1.0000	1.0000	0.7444	0.9571	0.8375	0.9995	0.8722
	LightGBM	0.7676	0.3717	0.5009	0.9974	0.8827	0.6111	0.2709	0.3754	0.9968	0.8042
	CatBoost	0.9974	1.0000	0.9987	1.0000	0.9987	0.6889	0.9688	0.8052	0.9995	0.8444
	ANN	0.9713	0.9947	0.9828	0.9999	0.9856	0.7222	0.7222	0.7222	0.9991	0.8609
BALANCED DATA											
UNDERSAMPLING	Logistic Regression	0.9243	0.9861	0.9542	0.9556	0.9556	0.8889	0.0390	0.0747	0.9651	0.9270
	Naïve Bayes	0.8642	0.9594	0.9093	0.9138	0.9138	0.8111	0.0487	0.0918	0.9746	0.8930
	KNN	0.9243	0.9779	0.9503	0.9517	0.9517	0.8556	0.0488	0.0923	0.9733	0.9145
	Decision Tree	1.0000	1.0000	1.0000	1.0000	1.0000	0.8889	0.0172	0.0337	0.9192	0.9041
	Random Forest	0.9896	1.0000	0.9948	0.9948	0.9948	0.8444	0.0578	0.1083	0.9779	0.9113
	AdaBoost	0.9922	1.0000	0.9961	0.9961	0.9961	0.8667	0.0226	0.0441	0.9404	0.9036
	XGBoost	1.0000	1.0000	1.0000	1.0000	1.0000	0.8889	0.0326	0.0629	0.9580	0.9235
	LightGBM	1.0000	1.0000	1.0000	1.0000	1.0000	0.8667	0.0371	0.0711	0.9641	0.9154
	CatBoost	1.0000	1.0000	1.0000	1.0000	1.0000	0.8889	0.0541	0.1019	0.9752	0.9321
	ANN	1.0000	1.0000	1.0000	1.0000	1.0000	0.9000	0.0230	0.0448	0.9391	0.9196
OVERSAMPLING	Logistic Regression	0.9221	0.9738	0.9472	0.9486	0.9486	0.8889	0.0549	0.1034	0.9756	0.9323
	Naïve Bayes	0.8644	0.9705	0.9144	0.9190	0.9190	0.8111	0.0459	0.0868	0.9729	0.8922
	KNN	1.0000	0.9996	0.9998	0.9998	0.9998	0.7778	0.7292	0.7527	0.9992	0.8887
	Decision Tree	1.0000	1.0000	1.0000	1.0000	1.0000	0.6889	0.7381	0.7126	0.9991	0.8443
	Random Forest	1.0000	1.0000	1.0000	1.0000	1.0000	0.6889	0.9538	0.8000	0.9995	0.8444
	AdaBoost	0.9666	0.9849	0.9756	0.9759	0.9759	0.8556	0.0831	0.1514	0.9848	0.9203
	XGBoost	1.0000	1.0000	1.0000	1.0000	1.0000	0.7667	0.9583	0.8519	0.9996	0.8833
	LightGBM	1.0000	0.9999	1.0000	1.0000	1.0000	0.8000	0.8571	0.8276	0.9995	0.8999
	CatBoost	1.0000	0.9998	0.9999	0.9999	0.9999	0.7889	0.8353	0.8114	0.9994	0.8943
	ANN	1.0000	0.9999	1.0000	1.0000	1.0000	0.6889	0.7126	0.7006	0.9991	0.8442

	Model	TRAINING SET					TESTING SET				
		Recall	Precision	F1 - Score	Accuracy	AUC	Recall	Precision	F1 - Score	Accuracy	AUC
SMOTE	Logistic Regression	0.9190	0.9714	0.9445	0.9460	0.9460	0.9111	0.0509	0.0965	0.9729	0.9421
	Naïve Bayes	0.8580	0.9709	0.9109	0.9161	0.9161	0.8111	0.0469	0.0887	0.9736	0.8925
	KNN	1.0000	0.9990	0.9995	0.9995	0.9995	0.8111	0.5177	0.6320	0.9985	0.9050
	Decision Tree	1.0000	1.0000	1.0000	1.0000	1.0000	0.7444	0.3988	0.5194	0.9978	0.8713
	Random Forest	1.0000	1.0000	1.0000	1.0000	1.0000	0.7556	0.8947	0.8193	0.9995	0.8777
	AdaBoost	0.9525	0.9783	0.9652	0.9657	0.9657	0.9000	0.0606	0.1136	0.9777	0.9389
	XGBoost	1.0000	1.0000	1.0000	1.0000	1.0000	0.7889	0.7717	0.7802	0.9993	0.8943
	LightGBM	1.0000	0.9993	0.9996	0.9996	0.9996	0.7778	0.5983	0.6763	0.9988	0.8885
	CatBoost	1.0000	0.9991	0.9996	0.9996	0.9996	0.8000	0.5000	0.6154	0.9984	0.8994
	ANN	1.0000	1.0000	1.0000	1.0000	1.0000	0.7111	0.7191	0.7151	0.9991	0.8553
ADASYN	Logistic Regression	0.8767	0.9107	0.8934	0.8953	0.8953	0.9222	0.0168	0.0329	0.9141	0.9182
	Naïve Bayes	0.5142	0.9218	0.6601	0.7352	0.7353	0.8444	0.0298	0.0576	0.9562	0.9004
	KNN	1.0000	0.9990	0.9995	0.9995	0.9995	0.8111	0.5177	0.6320	0.9985	0.9050
	Decision Tree	1.0000	1.0000	1.0000	1.0000	1.0000	0.7444	0.4786	0.5826	0.9983	0.8716
	Random Forest	1.0000	1.0000	1.0000	1.0000	1.0000	0.7778	0.9091	0.8383	0.9995	0.8888
	AdaBoost	0.9534	0.9501	0.9518	0.9517	0.9517	0.9000	0.0264	0.0512	0.9471	0.9236
	XGBoost	1.0000	1.0000	1.0000	1.0000	1.0000	0.7889	0.7802	0.7845	0.9993	0.8943
	LightGBM	1.0000	0.9986	0.9993	0.9993	0.9993	0.8111	0.4078	0.5428	0.9978	0.9046
	CatBoost	1.0000	0.9993	0.9996	0.9996	0.9996	0.8111	0.5034	0.6213	0.9984	0.9049
	ANN	1.0000	1.0000	1.0000	1.0000	1.0000	0.7111	0.7191	0.7151	0.9991	0.8553