Model	top_k features	Accuracy			Recall			Precision			F1		
		Training	Validation	Test	Training	Validation	Test	Training	Validation	Test	Training	Validation	Test
DT	10	0.893	0.89	0.877	0.893	0.889	0.876	0.976	0.974	0.977	0.815	0.808	0.814
	20	0.905	0.905	0.868	0.905	0.905	0.867	0.957	0.958	0.963	0.846	0.842	0.809
	40	0.943	0.944	0.898	0.943	0.943	0.897	0.96	0.957	0.958	0.914	0.916	0.855
	100	0.953	0.952	0.943	0.955	0.954	0.964	0.939	0.936	0.925	0.953	0.951	0.943
	200	0.955	0.956	0.905	0.963	0.962	0.958	0.935	0.936	0.866	0.954	0.955	0.905
	400	0.955	0.956	0.903	0.958	0.957	0.953	0.940	0.941	0.867	0.954	0.955	0.903
	800	0.964	0.963	0.891	0.955	0.951	0.880	0.963	0.963	0.9	0.963	0.962	0.891
	1600	0.963	0.962	0.910	0.975	0.972	0.968	0.942	0.940	0.867	0.962	0.961	0.910
	all	0.963	0.961	0.915	0.967	0.966	0.959	0.95	0.945	0.882	0.963	0.961	0.915
LR	10	0.873	0.867	0.871	0.872	0.866	0.871	0.934	0.927	0.947	0.805	0.796	0.823
	20	0.897	0.895	0.848	0.896	0.893	0.848	0.909	0.911	0.858	0.862	0.853	0.842
	40	0.952	0.949	0.921	0.951	0.949	0.921	0.953	0.953	0.958	0.937	0.931	0.892
	100	0.971	0.969	0.940	0.974	0.970	0.974	0.961	0.959	0.912	0.971	0.969	0.940
	200	0.985	0.984	0.952	0.988	0.987	0.987	0.977	0.975	0.922	0.984	0.983	0.952
	400	0.991	0.988	0.955	0.991	0.989	0.988	0.988	0.983	0.927	0.990	0.988	0.955
	800	0.997	0.990	0.957	0.996	0.990	0.990	0.997	0.985	0.929	0.997	0.989	0.957
	1600	0.999	0.991	0.959	0.998	0.992	0.991	0.999	0.986	0.932	0.999	0.990	0.959
	all	0.999	0.991	0.959	0.999	0.993	0.990	0.999	0.987	0.931	0.999	0.991	0.959
KNN	10	0.92	0.91	0.898	0.92	0.91	0.898	0.983	0.98	0.976	0.855	0.838	0.845
	20	0.984	0.98	0.945	0.984	0.979	0.945	0.984	0.978	0.966	0.98	0.975	0.926
	40	0.99	0.986	0.953	0.99	0.986	0.953	0.989	0.985	0.978	0.988	0.983	0.933
	100	0.991	0.988	0.955	0.994	0.992	0.989	0.986	0.979	0.925	0.991	0.988	0.955
	200	0.99	0.987	0.953	0.993	0.99	0.99	0.985	0.979	0.922	0.99	0.987	0.953
	400	0.99	0.986	0.953	0.992	0.988	0.984	0.986	0.978	0.927	0.99	0.985	0.953
	800	0.99	0.983	0.956	0.991	0.987	0.988	0.986	0.974	0.929	0.99	0.983	0.956
	1600	0.988	0.983	0.951	0.989	0.984	0.975	0.984	0.976	0.931	0.988	0.982	0.951
	all	0.987	0.981	0.95	0.988	0.984	0.975	0.982	0.973	0.928	0.987	0.981	0.95
RF	10	0.926	0.914	0.909	0.926	0.913	0.909	0.986	0.981	0.98	0.864	0.843	0.858
	20	0.998	0.982	0.956	0.998	0.982	0.956	0.997	0.976	0.968	0.999	0.983	0.946
	40	1	0.992	0.973	1	0.992	0.973	0.999	0.99	0.987	1	0.992	0.96
	100	0.999	0.992	0.976	0.999	0.987	0.983	1	0.994	0.969	0.999	0.992	0.976
	200	0.999	0.99	0.967	0.999	0.985	0.98	1	0.992	0.955	0.999	0.99	0.967
	400	0.999	0.991	0.969	0.999	0.986	0.98	1	0.993	0.96	0.999	0.991	0.969
	800	1	0.991	0.968	0.999	0.985	0.979	1	0.995	0.957	1	0.991	0.968
	1600	0.999	0.992	0.974	0.999	0.984	0.978	1	0.997	0.971	0.999	0.992	0.974
	all	0.999	0.994	0.975	0.999	0.987	0.975	1	0.997	0.975	0.999	0.993	0.975
XGBoost	10	0.917	0.909	0.895	0.917	0.909	0.894	0.983	0.981	0.978	0.851	0.835	0.838
	20	0.978	0.977	0.942	0.978	0.977	0.942	0.982	0.98	0.976	0.968	0.967	0.914
	40	0.991	0.989	0.956	0.991	0.989	0.956	0.992	0.988	0.987	0.987	0.986	0.93
	100	0.995	0.991	0.965	0.996	0.99	0.99	0.994	0.99	0.943	0.995	0.991	0.965
	200	0.997	0.992	0.963	0.997	0.992	0.989	0.996	0.99	0.939	0.996	0.992	0.963
	400	0.998	0.995	0.966	0.997	0.994	0.991	0.997	0.994	0.944	0.998	0.995	0.966
	800	0.998	0.995	0.968	0.998	0.994	0.99	0.998	0.995	0.949	0.998	0.995	0.968
	1600	0.999	0.994	0.969	0.998	0.993	0.99	0.999	0.994	0.95	0.999	0.994	0.969
	all	0.999	0.995	0.972	0.998	0.993	0.99	0.999	0.995	0.955	0.999	0.994	0.972
MLP	10	0.915	0.908	0.901	0.915	0.907	0.9	0.977	0.977	0.976	0.85	0.836	0.848
	20	0.987	0.983	0.945	0.987	0.982	0.945	0.987	0.981	0.969	0.984	0.979	0.924
	40	0.998	0.992	0.964	0.998	0.992	0.964	0.998	0.993	0.984	0.997	0.989	0.946
	100	1	0.993	0.966	1	0.993	0.99	1	0.991	0.944	1	0.993	0.966
	200	1	0.994	0.973	1	0.993	0.992	1	0.993	0.955	1	0.994	0.973
	400	1	0.994	0.969	1	0.993	0.993	1	0.992	0.947	1	0.994	0.969
	800	1	0.992	0.964	1	0.993	0.993	1	0.989	0.938	1	0.992	0.964
	1600	1	0.993	0.97	1	0.993	0.99	1	0.992	0.952	1	0.993	0.97
	all	1	0.993	0.968	1	0.99	0.988	1	0.993	0.95	1	0.993	0.968