Department of Computer Science and Engineering

Project (Task-2)

Course Code: CSE 475
Course Title: Machine Learning
Group:06

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Model: MobileNet

Ratio	Accuracy	Precision	Recall	f1-score	Time
90:10	1.0	1.0	1.0	1.0	40.01
80:20	0.9497206703910616	0.959045584045584	0.9235989235989236	0.9361127165224176	81.36
70:30	0.9813432835820896	0.9805752003771806	0.9791814862237396	0.9797531828583744	121.15
60:40	0.9301675977653632	0.9469861362266426	0.9023809523809524	0.9146662317895194	164.16
50:50	0.9574944071588368	0.958486801718846	0.9462262419782324	0.951144710568194	207.45
40:60	0.9384328358208956	0.9439870236883304	0.9215200931857892	0.9285135137715952	245.8
30:70	0.9552715654952076	0.9534883154351348	0.94488936514203	0.9485480251150524	286.7
20:80	0.9468531468531468	0.9539334764052122	0.928922305764411	0.937319511727471	330.62
10:90	0.8059701492537313	0.8621381036634165	0.7464366438852243	0.7279805253587884	338.72

Model:VGG16

Ratio	Accuracy	Precision	Recall	f1-score	Time
90:10	0.966667	0.966583	0.960688	0.963411	4.086435
80:20	0.966480	0.958517	0.965068	0.961448	3.744490
70:30	0.970149	0.967337	0.966892	0.967098	3.317273
60:40	0.955307	0.949222	0.956617	0.951817	2.879715
50:50	0.968680	0.967182	0.963494	0.965192	2.440363
40:60	0.960821	0.956768	0.956135	0.956325	2.005527
30:70	0.960064	0.955196	0.956995	0.956002	1.542388
20:80	0.955245	0.948999	0.954423	0.951010	1.103319
10:90	0.946517	0.938407	0.944822	0.940676	0.645261

Model:ResNet50

Ratio	Accuracy	Precision	Recall	f1-score	Time
90:10	0.944030	0.936756	0.938835	0.937728	
80:20	0.946853	0.947299	0.933332	0.938612	
70:30	0.948882	0.945646	0.938972	0.941861	
60:40	0.951493	0.959898	0.934343	0.942821	
50:50	0.982103	0.977913	0.983068	0.980185	
40:60	0.986034	0.985000	0.983661	0.984298	
30:70	0.981343	0.979966	0.978182	0.979016	
20:80	0.988827	0.987449	0.987449	0.987449	
10:90	0.988889	0.990476	0.984848	0.987417	

Model: CNN

Ratio	Accuracy	Precision	Recall	f1-score	Time
90:10	0.926667	0.932450	0.926667	0.922507	
80:20	0.880726	0.880667	0.880726	0.870030	
70:30	0.886754	0.900060	0.886754	0.883054	
60:40	0.880168	0.883641	0.880168	0.871954	
50:50	0.862752	0.873769	0.862752	0.859631	
40:60	0.865578	0.872903	0.865578	0.858008	
30:70	0.852157	0.858061	0.852157	0.840055	
20:80	0.815664	0.812358	0.815664	0.801504	
10:90	0.770211	0.751275	0.770211	0.746870	

Model: EfficientNet-B0

Ratio	Accuracy	Precision	Recall	f1-score	Train - Time (sec)	Test - Time (sec)
90:10	100	1	1	1	12827.4	57.04
80:20	99.72	0.9974	0.9971	0.9972	10199.52	91.67
70:30	99.81	0.9982	0.9981	0.9981	10115.62	157.2
60:40	99.72	0.9972	0.9973	0.9972	8710.04	211.23
50:50	100	1	1	1	7203.44	264.25
40:60	99.81	0.9982	0.9981	0.9981	5741.18	334.66
30:70	99.84	0.9984	0.9984	0.9984	4518.65	373.76
20:30	99.93	0.9993	0.9993	0.9993	2928.06	418.65
10:90	99.26	0.9925	0.9927	0.9926	1521.6	464.22