

## **Hyper-parameter Space:**

<b>Hyper-parameter Name</b>	<b>Value</b>
Batch size	[16,32]
Learning Rate	0.0001
Epoch	50
Optimizer	Adam
Dropout	[0.3,0.5]
Training Image	5673
Validation Image	2429
Total Image	8102 (Every class has more than 1530+ images)

No	Model	Batch size	Learning Rate	Epoch	Optimizer	Dropout	Val Loss	Val Accuracy
1	VGG16	16	0.0001	50	Adam	0.3	0.0676	97.53%
2		16	0.0001	50	Adam	0.5	0.0629	97.78%
3		32	0.0001	50	Adam	0.3	0.0691	97.86%
4		32	0.0001	50	Adam	0.5	0.0540	97.24%
5	VGG19	16	0.0001	50	Adam	0.3	0.1819	96.62%
6		16	0.0001	50	Adam	0.5	0.2432	96.29%
7		32	0.0001	50	Adam	0.3	0.3409	96.38%
8		32	0.0001	50	Adam	0.5	---	----
9	ResNet50	16	0.0001	50	Adam	0.3	0.0644	98.56%
10		16	0.0001	50	Adam	0.5	0.0603	98.31%
11		32	0.0001	50	Adam	0.3	0.0523	98.60%
12		32	0.0001	50	Adam	0.5	0.0864	98.15%
13	ResNet152	16	0.0001	50	Adam	0.3	0.1213	98.07%
14		16	0.0001	50	Adam	0.5	0.1020	98.15%
15		32	0.0001	50	Adam	0.3	0.0954	97.78%
16		32	0.0001	50	Adam	0.5	0.1216	98.02%
17	DenseNet121	16	0.0001	50	Adam	0.3	0.3346	90.49%
18		16	0.0001	50	Adam	0.5	0.8116	72.42%
19		32	0.0001	50	Adam	0.3	0.5273	88.88%
20		32	0.0001	50	Adam	0.5	1.1070	49.24%
21	DenseNet201	16	0.0001	50	Adam	0.3	0.2112	94.81%
22		16	0.0001	50	Adam	0.5	0.2604	92.63%
23		32	0.0001	50	Adam	0.3	0.1606	93.00%
24		32	0.0001	50	Adam	0.5	0.6631	78.31%
33	MobileNet	16	0.0001	50	Adam	0.3	0.2186	94.94%
34		16	0.0001	50	Adam	0.5	0.2148	94.69%
35		32	0.0001	50	Adam	0.3	0.2793	94.15%
36		32	0.0001	50	Adam	0.5	0.2150	94.61%
37	EfficientNet	16	0.0001	50	Adam	0.3	0.0712	98.27%
38		16	0.0001	50	Adam	0.5	0.0527	98.56%
39		32	0.0001	50	Adam	0.3	0.0551	98.52%
40		32	0.0001	50	Adam	0.5	0.0703	98.76%