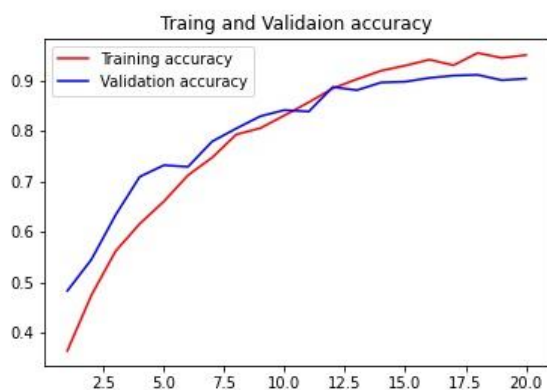
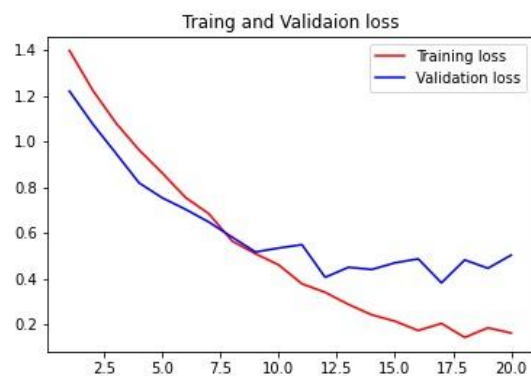


圖表一、輸入層 120x120

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1/20	0.3647	0.4833	0.9565	0.9106	0.9788	0.9197
Epoch 2/20	0.4748	0.5455	0.9565	0.9000	0.9818	0.9091
Epoch 3/20	0.5619	0.6333	0.9659	0.9061	0.9799	0.9121
Epoch 4/20	0.6160	0.7091	0.9569	0.9091	0.9822	0.9136
Epoch 5/20	0.6602	0.7318	0.9580	0.9045	0.9830	0.9136
Epoch 6/20	0.7121	0.7288	0.9735	0.9106	0.9837	0.9182
Epoch 7/20	0.7469	0.7788	0.9667	0.8985	0.9875	0.9152
Epoch 8/20	0.7927	0.8045	0.9697	0.9167	0.9799	0.9076
Epoch 9/20	0.8051	0.8288	0.9758	0.9091	0.9845	0.9167
Epoch 10/20	0.8305	0.8409	0.9792	0.9136	0.9841	0.9121
Epoch 11/20	0.8562	0.8379	0.9849	0.9152	0.9883	0.9182
Epoch 12/20	0.8838	0.8864	0.9799	0.9121	0.9856	0.9030
Epoch 13/20	0.9020	0.8803	0.9754	0.9212	0.9841	0.9061
Epoch 14/20	0.9187	0.8955	0.9629	0.9152	0.9773	0.9091
Epoch 15/20	0.9289	0.8970	0.9671	0.9136	0.9849	0.9061
Epoch 16/20	0.9406	0.9045	0.9705	0.9197	0.9807	0.9167
Epoch 17/20	0.9296	0.9091	0.9773	0.9030	0.9792	0.9167
Epoch 18/20	0.9538	0.9106	0.9697	0.8924	0.9898	0.9152
Epoch 19/20	0.9440	0.9000	0.9743	0.9091	0.9864	0.9197
Epoch 20/20	0.9497	0.9030	0.9777	0.9227	0.9815	0.9106
AVG.	0.7886	0.8005	0.9699	0.9102	0.9832	0.9130



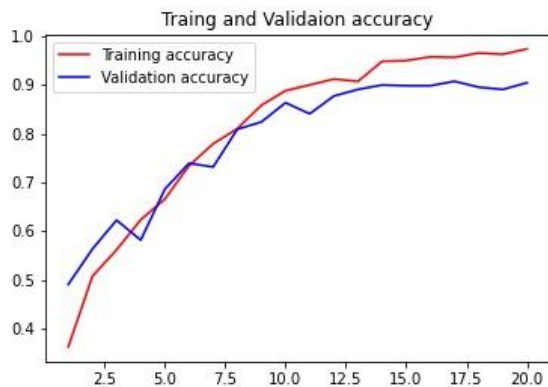
▲訓練與測試精準度
(輸入層 120x120)



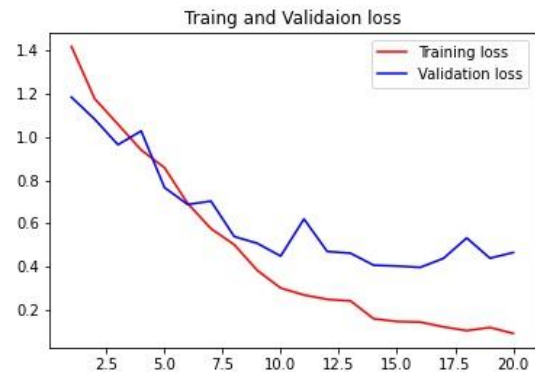
▲訓練與測試損耗
(輸入層 120x120)

圖表二、輸入層 150x150

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1/20	0.3628	0.4909	0.9330	0.8591	0.9705	0.9091
Epoch 2/20	0.5078	0.5636	0.9361	0.9000	0.9644	0.9136
Epoch 3/20	0.5619	0.6227	0.9463	0.9015	0.9747	0.8985
Epoch 4/20	0.6235	0.5818	0.9425	0.9106	0.9724	0.9076
Epoch 5/20	0.6659	0.6864	0.9467	0.9030	0.9690	0.9106
Epoch 6/20	0.7344	0.7394	0.9508	0.9076	0.9754	0.9106
Epoch 7/20	0.7794	0.7318	0.9519	0.8909	0.9784	0.9136
Epoch 8/20	0.8104	0.8091	0.9417	0.9076	0.9724	0.9106
Epoch 9/20	0.8585	0.8242	0.9531	0.9106	0.9599	0.8939
Epoch 10/20	0.8884	0.8636	0.9595	0.9091	0.9625	0.8955
Epoch 11/20	0.9001	0.8409	0.9659	0.9076	0.9762	0.9030
Epoch 12/20	0.9122	0.8773	0.9595	0.9106	0.9796	0.9030
Epoch 13/20	0.9073	0.8909	0.9603	0.9106	0.9743	0.9000
Epoch 14/20	0.9485	0.9000	0.9671	0.9152	0.9754	0.9121
Epoch 15/20	0.9501	0.8985	0.9512	0.8955	0.9788	0.9045
Epoch 16/20	0.9576	0.8985	0.9622	0.9136	0.9811	0.9106
Epoch 17/20	0.9569	0.9076	0.9622	0.9197	0.9845	0.9121
Epoch 18/20	0.9656	0.8955	0.9712	0.9106	0.9720	0.9121
Epoch 19/20	0.9629	0.8909	0.9671	0.9106	0.9811	0.9106
Epoch 20/20	0.9739	0.9045	0.9678	0.9136	0.9807	0.9030
AVG.	0.8114	0.7909	0.9548	0.9054	0.9742	0.9067



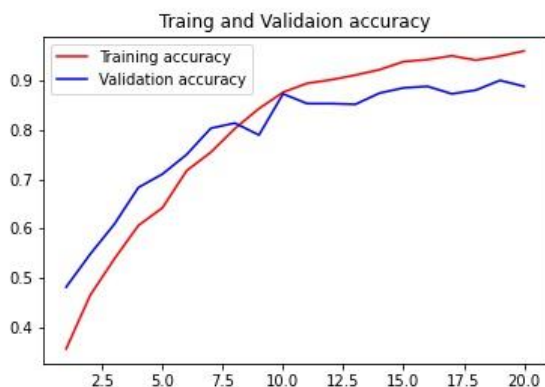
▲訓練與測試精準度
(輸入層 150x150)



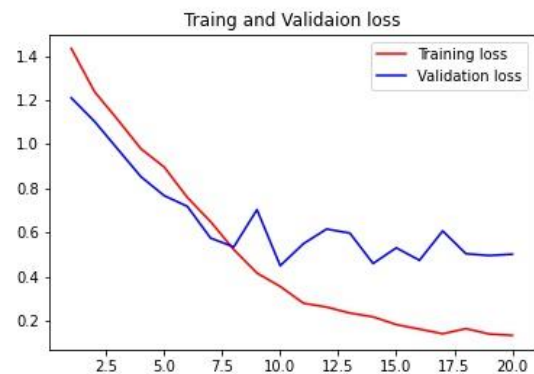
▲訓練與測試損耗
(輸入層 150x150)

圖表三、輸入層 180x180

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1/20	0.3568	0.4818	0.9330	0.8939	0.9777	0.9045
Epoch 2/20	0.4654	0.5485	0.9629	0.8879	0.9701	0.9091
Epoch 3/20	0.5388	0.6091	0.9648	0.8894	0.9724	0.8924
Epoch 4/20	0.6065	0.6833	0.9538	0.8894	0.9724	0.9106
Epoch 5/20	0.6425	0.7106	0.9489	0.8803	0.9777	0.9061
Epoch 6/20	0.7174	0.7500	0.9557	0.8955	0.9735	0.9197
Epoch 7/20	0.7544	0.8030	0.9580	0.8818	0.9856	0.9091
Epoch 8/20	0.8025	0.8136	0.9557	0.9106	0.9803	0.9045
Epoch 9/20	0.8430	0.7894	0.9629	0.8848	0.9834	0.9030
Epoch 10/20	0.8759	0.8727	0.9659	0.8939	0.9834	0.9076
Epoch 11/20	0.8941	0.8530	0.9671	0.8864	0.9788	0.9121
Epoch 12/20	0.9012	0.8530	0.9599	0.9091	0.9750	0.9076
Epoch 13/20	0.9107	0.8515	0.9709	0.9030	0.9762	0.8970
Epoch 14/20	0.9217	0.8742	0.9728	0.910	0.9781	0.8985
Epoch 15/20	0.9379	0.8848	0.9709	0.8985	0.9720	0.9015
Epoch 16/20	0.9421	0.8879	0.9720	0.9030	0.9777	0.9000
Epoch 17/20	0.9497	0.8727	0.9694	0.9076	0.9728	0.9045
Epoch 18/20	0.9410	0.8803	0.9622	0.9045	0.9792	0.8955
Epoch 19/20	0.9489	0.9000	0.9781	0.9061	0.9807	0.9015
Epoch 20/20	0.9595	0.8873	0.9750	0.9076	0.9765	0.9061
AVG.	0.7955	0.7903	0.9630	0.8972	0.9772	0.9045



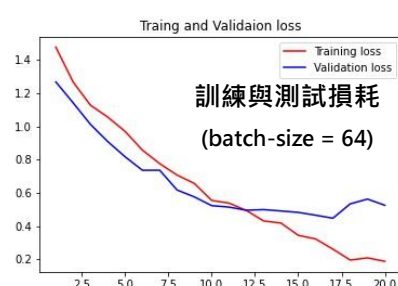
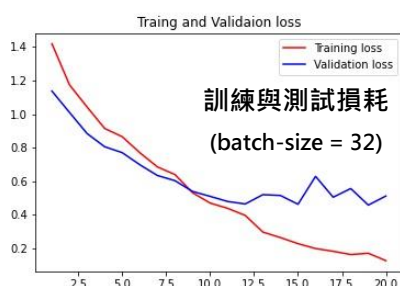
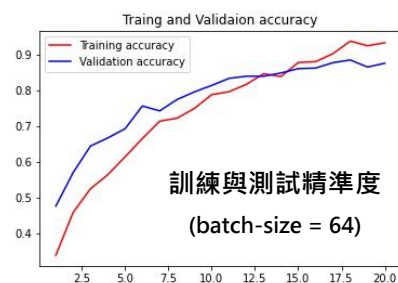
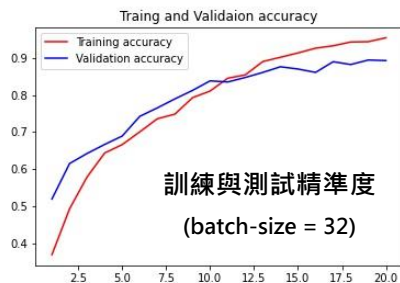
▲訓練與測試精準度
(輸入層 180x180)



▲訓練與測試損耗
(輸入層 180x180)

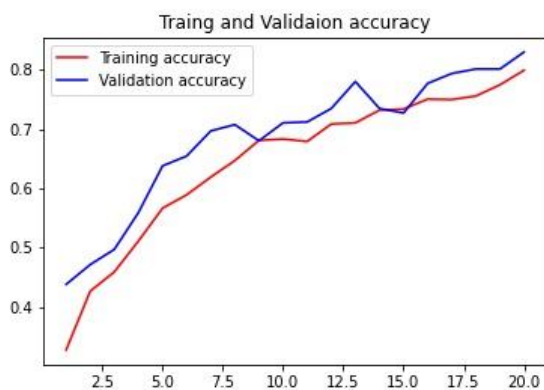
圖表四、Batch Size

	Batch size = 32		Batch size = 64	
	訓練	測試	訓練	測試
Epoch 1/20	0.3700	0.5197	0.3383	0.4758
Epoch 2/20	0.4930	0.6152	0.4582	0.5697
Epoch 3/20	0.5793	0.6424	0.5244	0.6439
Epoch 4/20	0.6436	0.6667	0.5638	0.6667
Epoch 5/20	0.6663	0.6894	0.6137	0.6924
Epoch 6/20	0.7007	0.7424	0.6652	0.7561
Epoch 7/20	0.7359	0.7652	0.7136	0.7424
Epoch 8/20	0.7484	0.7894	0.7219	0.7742
Epoch 9/20	0.7927	0.8121	0.7491	0.7955
Epoch 10/20	0.8104	0.8379	0.7877	0.8136
Epoch 11/20	0.8449	0.8348	0.7961	0.8333
Epoch 12/20	0.8540	0.8470	0.8165	0.8394
Epoch 13/20	0.8899	0.8606	0.8464	0.8394
Epoch 14/20	0.9012	0.8758	0.8384	0.8485
Epoch 15/20	0.9130	0.8697	0.8778	0.8606
Epoch 16/20	0.9258	0.8606	0.8801	0.8621
Epoch 17/20	0.9323	0.8894	0.9024	0.8773
Epoch 18/20	0.9425	0.8818	0.9376	0.8848
Epoch 19/20	0.9432	0.8939	0.9247	0.8652
Epoch 20/20	0.9538	0.8924	0.9330	0.8758
AVG.	0.7820	0.7893	0.7444	0.7758

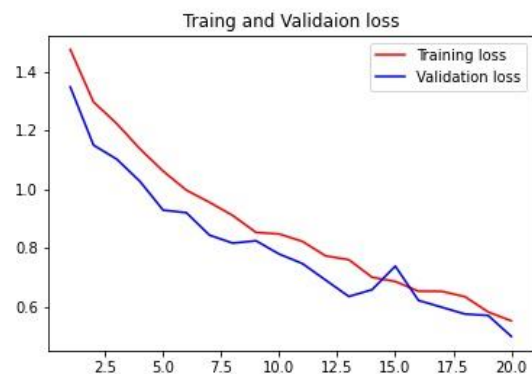


圖表五、Randonflip()

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1/20	0.3273	0.4379	0.7988	0.8182	0.8861	0.8818
Epoch 2/20	0.4264	0.4712	0.8070	0.8364	0.8994	0.8788
Epoch 3/20	0.4589	0.4970	0.8180	0.8061	0.8944	0.8833
Epoch 4/20	0.5112	0.5591	0.8089	0.8242	0.8994	0.8970
Epoch 5/20	0.5664	0.6379	0.8214	0.8182	0.9035	0.8970
Epoch 6/20	0.5891	0.6545	0.8316	0.8121	0.9168	0.8591
Epoch 7/20	0.6190	0.6970	0.8271	0.8273	0.9179	0.8879
Epoch 8/20	0.6470	0.7076	0.8392	0.8394	0.9240	0.9076
Epoch 9/20	0.6810	0.6803	0.8453	0.8667	0.9156	0.8606
Epoch 10/20	0.6833	0.7106	0.8524	0.8682	0.9130	0.9000
Epoch 11/20	0.6792	0.7121	0.8517	0.8848	0.9217	0.9106
Epoch 12/20	0.7087	0.7348	0.8509	0.8485	0.9202	0.8818
Epoch 13/20	0.7106	0.7803	0.8702	0.8773	0.9251	0.8879
Epoch 14/20	0.7321	0.7348	0.8774	0.8682	0.9258	0.8697
Epoch 15/20	0.7340	0.7273	0.8683	0.8864	0.9300	0.8833
Epoch 16/20	0.7507	0.7773	0.8740	0.8848	0.9357	0.8970
Epoch 17/20	0.7499	0.7939	0.8680	0.8833	0.9262	0.8818
Epoch 18/20	0.7560	0.8015	0.8910	0.8848	0.9209	0.9197
Epoch 19/20	0.7749	0.8015	0.8895	0.8864	0.9391	0.8909
Epoch 20/20	0.7995	0.8303	0.8952	0.8682	0.9224	0.8970
AVG.	0.6453	0.6873	0.8493	0.8545	0.9169	0.8886



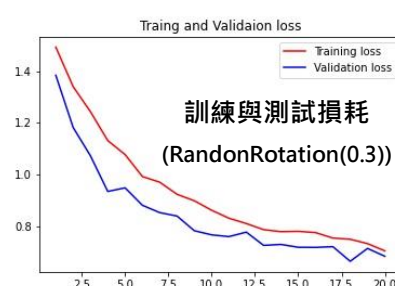
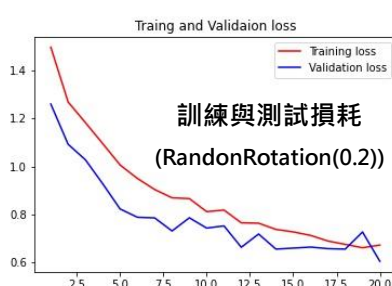
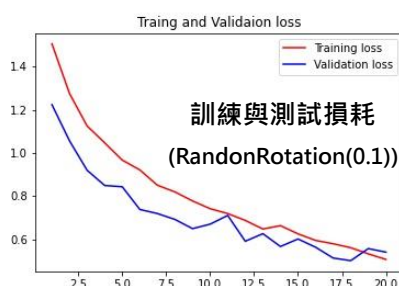
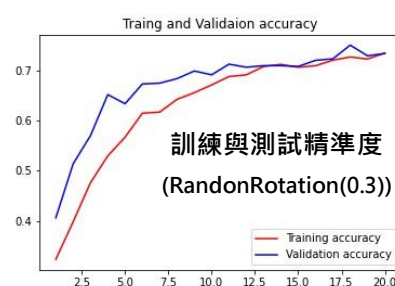
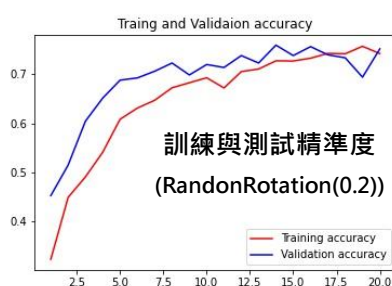
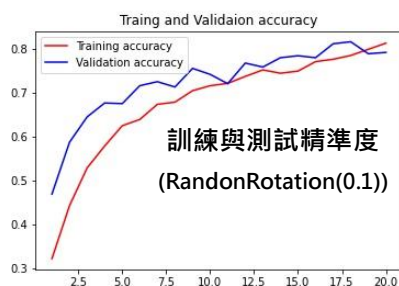
▲訓練與測試精準度
(randonflip)



▲訓練與測試損耗
(randonflip)

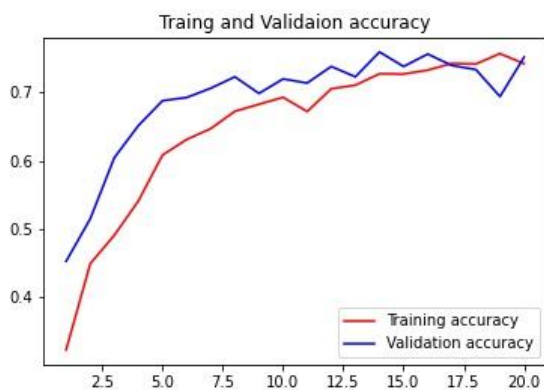
圖表六、RandonRotation()

	0.1		0.2		0.3	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1/20	0.3227	0.4697	0.3235	0.4530	0.3235	0.4061
Epoch 2/20	0.4434	0.5879	0.4495	0.5152	0.3980	0.5136
Epoch 3/20	0.5293	0.6455	0.4911	0.6045	0.4760	0.5697
Epoch 4/20	0.5793	0.6773	0.5414	0.6515	0.5293	0.6515
Epoch 5/20	0.6254	0.6758	0.6084	0.6879	0.5668	0.6333
Epoch 6/20	0.6398	0.7167	0.6311	0.6924	0.6145	0.6727
Epoch 7/20	0.6742	0.7258	0.6470	0.7061	0.6167	0.6742
Epoch 8/20	0.6792	0.7136	0.6723	0.7227	0.6421	0.6833
Epoch 9/20	0.7053	0.7561	0.6826	0.6985	0.6553	0.6985
Epoch 10/20	0.7166	0.7424	0.6928	0.7197	0.6708	0.6909
Epoch 11/20	0.7219	0.7212	0.6720	0.7136	0.6875	0.7121
Epoch 12/20	0.7378	0.7682	0.7053	0.7379	0.6909	0.7061
Epoch 13/20	0.7526	0.7591	0.7106	0.7227	0.7075	0.7091
Epoch 14/20	0.7450	0.7803	0.7272	0.7591	0.7117	0.7091
Epoch 15/20	0.7499	0.7848	0.7268	0.7379	0.7060	0.7076
Epoch 16/20	0.7715	0.7803	0.7325	0.7561	0.7090	0.7197
Epoch 17/20	0.7768	0.8121	0.7423	0.7394	0.7200	0.7227
Epoch 18/20	0.7855	0.8167	0.7416	0.7333	0.7264	0.7500
Epoch 19/20	0.7995	0.7894	0.7567	0.6939	0.7223	0.7288
Epoch 20/20	0.8135	0.7924	0.7420	0.7515	0.7344	0.7333
AVG.	0.6785	0.7258	0.6498	0.6898	0.6304	0.6696

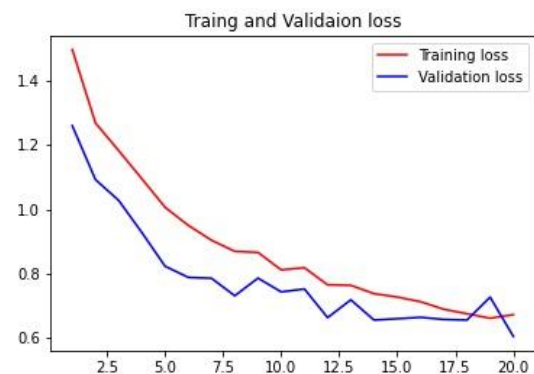


圖表七、RandonRotation(0.1)

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1/20	0.3227	0.4697	0.7889	0.7667	0.8801	0.8788
Epoch 2/20	0.4434	0.5879	0.7942	0.8197	0.8816	0.8682
Epoch 3/20	0.5293	0.6455	0.8150	0.8197	0.8801	0.8682
Epoch 4/20	0.5793	0.6773	0.8089	0.8061	0.8857	0.8712
Epoch 5/20	0.6254	0.6758	0.8169	0.8409	0.8952	0.8485
Epoch 6/20	0.6398	0.7167	0.8142	0.8030	0.8714	0.8379
Epoch 7/20	0.6742	0.7258	0.8120	0.8303	0.8785	0.8667
Epoch 8/20	0.6792	0.7136	0.8358	0.8273	0.8785	0.8485
Epoch 9/20	0.7053	0.7561	0.8464	0.8061	0.8884	0.8697
Epoch 10/20	0.7166	0.7424	0.8411	0.8409	0.9031	0.9000
Epoch 11/20	0.7219	0.7212	0.8589	0.8348	0.8888	0.8636
Epoch 12/20	0.7378	0.7682	0.8536	0.8636	0.8861	0.8909
Epoch 13/20	0.7526	0.7591	0.8513	0.8394	0.9024	0.8803
Epoch 14/20	0.7450	0.7803	0.8392	0.8394	0.9005	0.8818
Epoch 15/20	0.7499	0.7848	0.8570	0.8242	0.8903	0.8758
Epoch 16/20	0.7715	0.7803	0.8581	0.8439	0.9016	0.8985
Epoch 17/20	0.7768	0.8121	0.8619	0.8470	0.9126	0.8955
Epoch 18/20	0.7855	0.8167	0.8664	0.8561	0.9156	0.8803
Epoch 19/20	0.7995	0.7894	0.8710	0.8606	0.9111	0.8712
Epoch 20/20	0.8135	0.7924	0.8721	0.8606	0.9156	0.8924
AVG.	0.6785	0.7258	0.8381	0.8315	0.8934	0.8744



▲訓練與測試精準度
(RandonRotation)



▲訓練與測試損耗
(RandonRotation)

圖表八、Epoch

	Epoch = 10		Epoch = 20		Epoch = 30	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1	0.3681	0.4545	0.3314	0.4712	0.3330	0.4500
Epoch 2	0.4521	0.5773	0.4650	0.5182	0.4257	0.5091
Epoch 3	0.5062	0.6197	0.5081	0.5894	0.4941	0.5455
Epoch 4	0.5876	0.6727	0.5785	0.6439	0.5789	0.6606
Epoch 5	0.6228	0.7167	0.6235	0.6667	0.6349	0.7045
Epoch 6	0.6682	0.7167	0.6818	0.7273	0.6841	0.7470
Epoch 7	0.6829	0.7167	0.7189	0.7318	0.7314	0.7515
Epoch 8	0.7193	0.7667	0.7465	0.7470	0.7692	0.7742
Epoch 9	0.7529	0.7985	0.7688	0.7879	0.8002	0.8091
Epoch 10	0.7771	0.8076	0.7881	0.8182	0.8218	0.8273
Epoch 11	-	-	0.8396	0.8530	0.8657	0.8409
Epoch 12	-	-	0.8589	0.8470	0.8763	0.8667
Epoch 13	-	-	0.8664	0.8545	0.8748	0.8485
Epoch 14	-	-	0.8997	0.8909	0.8903	0.8712
Epoch 15	-	-	0.9016	0.8970	0.9187	0.8667
Epoch 16	-	-	0.9024	0.9091	0.9168	0.8833
Epoch 17	-	-	0.9262	0.8848	0.9345	0.8727
Epoch 18	-	-	0.9353	0.8848	0.9429	0.8894
Epoch 19	-	-	0.9327	0.8727	0.9425	0.8621
Epoch 20	-	-	0.9410	0.8924	0.9414	0.8758
Epoch 21	-	-	-	-	0.9493	0.8773
Epoch 22	-	-	-	-	0.9542	0.8864
Epoch 23	-	-	-	-	0.9538	0.9045
Epoch 24	-	-	-	-	0.9501	0.8909
Epoch 25	-	-	-	-	0.9576	0.8955
Epoch 26	-	-	-	-	0.9614	0.8985
Epoch 27	-	-	-	-	0.9656	0.9015
Epoch 28	-	-	-	-	0.9690	0.9076
Epoch 29	-	-	-	-	0.9652	0.8924
Epoch 30	-	-	-	-	0.9712	0.9076
AVG.	0.6137	0.6847	0.7607	0.7744	0.8325	0.8139
PRED,	83.74%		97.69%		99.51%	

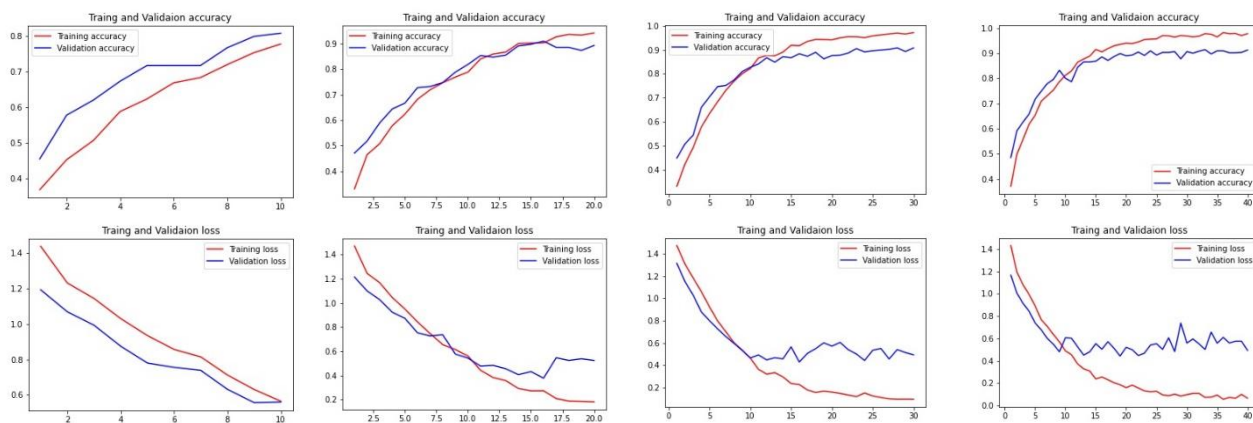
圖表八、Epoch

Epoch = 40

	訓練	測試		訓練	測試
Epoch 1	0.3062	0.4848	Epoch 21	0.9330	0.8924
Epoch 2	0.4805	0.5909	Epoch 22	0.9473	0.9045
Epoch 3	0.5432	0.6258	Epoch 23	0.9556	0.8909
Epoch 4	0.6159	0.6576	Epoch 24	0.9420	0.9091
Epoch 5	0.6551	0.7167	Epoch 25	0.9516	0.8924
Epoch 6	0.7022	0.7485	Epoch 26	0.9691	0.9030
Epoch 7	0.7265	0.7788	Epoch 27	0.9659	0.9030
Epoch 8	0.7644	0.7955	Epoch 28	0.9575	0.9061
Epoch 9	0.7821	0.8318	Epoch 29	0.9741	0.8773
Epoch 10	0.8065	0.8000	Epoch 30	0.9629	0.9061
Epoch 11	0.8282	0.7864	Epoch 31	0.9654	0.9000
Epoch 12	0.8550	0.8439	Epoch 32	0.9659	0.9076
Epoch 13	0.8644	0.8652	Epoch 33	0.9793	0.9136
Epoch 14	0.8805	0.8652	Epoch 34	0.9749	0.8970
Epoch 15	0.9090	0.8682	Epoch 35	0.9537	0.9091
Epoch 16	0.8946	0.8848	Epoch 36	0.9790	0.9091
Epoch 17	0.9164	0.8712	Epoch 37	0.9786	0.9015
Epoch 18	0.9207	0.8864	Epoch 38	0.9793	0.9015
Epoch 19	0.9322	0.8985	Epoch 39	0.9678	0.9030
Epoch 20	0.9473	0.8894	Epoch 40	0.9793	0.9121
	AVG.			0.8653	0.8432
	PRED.				100%

訓練與測試精準度

(epoch=10,20,30,40)



訓練與測試損耗

(epoch=10,20,30,40)

圖表九、Grey-Epoch

	Epoch = 15		Epoch = 30	
	訓練	測試	訓練	測試
Epoch 1	0.2256	0.2455	0.2350	0.3000
Epoch 2	0.2623	0.3000	0.3126	0.3727
Epoch 3	0.3147	0.3545	0.3612	0.4470
Epoch 4	0.3631	0.4424	0.4097	0.4939
Epoch 5	0.4108	0.4621	0.4731	0.4439
Epoch 6	0.4482	0.5318	0.4718	0.4924
Epoch 7	0.4785	0.5636	0.5362	0.5924
Epoch 8	0.5315	0.6167	0.5691	0.4985
Epoch 9	0.5639	0.6500	0.5925	0.6136
Epoch 10	0.6105	0.6652	0.6594	0.5955
Epoch 11	0.6383	0.7045	0.6747	0.7500
Epoch 12	0.6605	0.7379	0.7209	0.7409
Epoch 13	0.6988	0.7485	0.7288	0.7394
Epoch 14	0.7069	0.7652	0.7747	0.7909
Epoch 15	0.7252	0.7621	0.7835	0.8106
Epoch 16	-	-	0.8039	0.8273
Epoch 17	-	-	0.8302	0.8424
Epoch 18	-	-	0.8655	0.8303
Epoch 19	-	-	0.8608	0.8318
Epoch 20	-	-	0.8732	0.8652
Epoch 21	-	-	0.8707	0.8545
Epoch 22	-	-	0.8792	0.8515
Epoch 23	-	-	0.8938	0.8561
Epoch 24	-	-	0.9054	0.8591
Epoch 25	-	-	0.9108	0.8394
Epoch 26	-	-	0.9130	0.8667
Epoch 27	-	-	0.9027	0.8500
Epoch 28	-	-	0.9172	0.8636
Epoch 29	-	-	0.9295	0.8561
Epoch 30	-	-	0.9191	0.8773
AVG.	0.2546	0.285	0.7193	0.7151
PRED,	89.72%		97.22%	

圖表十、Grey

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1	0.2191	0.2773	0.2367	0.3030	0.2339	0.2424
Epoch 2	0.2449	0.3273	0.2802	0.3303	0.2499	0.3076
Epoch 3	0.3224	0.3136	0.3369	0.3879	0.3197	0.3879
Epoch 4	0.3585	0.3985	0.3553	0.4394	0.3773	0.4606
Epoch 5	0.3855	0.4697	0.4462	0.4970	0.4088	0.4530
Epoch 6	0.4278	0.4697	0.4672	0.5167	0.4438	0.5242
Epoch 7	0.4807	0.4742	0.5273	0.5455	0.4867	0.5455
Epoch 8	0.5094	0.5652	0.5522	0.5712	0.5415	0.6136
Epoch 9	0.5407	0.5955	0.5930	0.6045	0.5944	0.5727
Epoch 10	0.6111	0.6970	0.6319	0.6606	0.6137	0.6318
Epoch 11	0.6333	0.6530	0.6724	0.6485	0.6630	0.7273
Epoch 12	0.6758	0.6879	0.6889	0.6879	0.6849	0.7258
Epoch 13	0.6947	0.7636	0.7140	0.7273	0.7376	0.7621
Epoch 14	0.7186	0.7788	0.7439	0.7636	0.7592	0.7439
Epoch 15	0.7410	0.7667	0.7649	0.7530	0.7948	0.7955
Epoch 16	0.7665	0.8030	0.7811	0.7833	0.7954	0.7939
Epoch 17	0.7998	0.8076	0.8035	0.7970	0.8298	0.8227
Epoch 18	0.8205	0.8197	0.7971	0.8015	0.8593	0.8212
Epoch 19	0.8316	0.8470	0.8094	0.7985	0.8609	0.8242
Epoch 20	0.8438	0.8288	0.8281	0.7864	0.8896	0.8303
Epoch 21	0.8664	0.8470	0.8235	0.7848	0.8968	0.8030
Epoch 22	0.8784	0.8682	0.8224	0.8212	0.8936	0.8364
Epoch 23	0.8908	0.8712	0.8700	0.8212	0.9026	0.8470
Epoch 24	0.8973	0.8697	0.8719	0.8106	0.9169	0.8439
Epoch 25	0.8986	0.8682	0.8691	0.7985	0.8975	0.8455
Epoch 26	0.9024	0.8652	0.8634	0.8242	0.9035	0.8636
Epoch 27	0.9208	0.8500	0.8791	0.8182	0.9260	0.8530
Epoch 28	0.9215	0.8576	0.8886	0.8288	0.9250	0.8485
Epoch 29	0.9147	0.8621	0.8911	0.8303	0.9297	0.8636
Epoch 30	0.9032	0.8515	0.8970	0.8273	0.9405	0.8591
AVG.	0.6873	0.698	0.6902	0.6856	0.7092	0.7017
PRED,	98.60%		94.20%		99.84%	

圖表十一、RGB

	第一次		第二次		第三次	
	訓練	測試	訓練	測試	訓練	測試
Epoch 1	0.2485	0.3758	0.2797	0.4864	0.2918	0.4712
Epoch 2	0.3955	0.5182	0.4720	0.5409	0.4660	0.5576
Epoch 3	0.4875	0.6197	0.5520	0.5773	0.5447	0.6348
Epoch 4	0.5681	0.6667	0.6108	0.6197	0.5931	0.7030
Epoch 5	0.6084	0.6864	0.6423	0.6045	0.6522	0.7045
Epoch 6	0.6475	0.7303	0.6697	0.6545	0.7091	0.7576
Epoch 7	0.6922	0.7439	0.6994	0.7045	0.7483	0.7394
Epoch 8	0.7417	0.7924	0.7475	0.7227	0.8045	0.7652
Epoch 9	0.7603	0.7879	0.7776	0.7485	0.8288	0.8182
Epoch 10	0.7673	0.8000	0.7944	0.8106	0.8248	0.8485
Epoch 11	0.8219	0.8288	0.8081	0.8076	0.8639	0.8333
Epoch 12	0.8254	0.8318	0.8369	0.8258	0.8838	0.8485
Epoch 13	0.8449	0.8409	0.8623	0.8394	0.8987	0.8758
Epoch 14	0.8475	0.8091	0.8876	0.8712	0.9249	0.8742
Epoch 15	0.8663	0.8591	0.8985	0.8833	0.9253	0.8712
Epoch 16	0.8994	0.8712	0.9196	0.8939	0.9368	0.8955
Epoch 17	0.8985	0.8667	0.9301	0.8894	0.9532	0.8864
Epoch 18	0.9015	0.8727	0.9182	0.9045	0.9447	0.9000
Epoch 19	0.9045	0.8606	0.9458	0.8818	0.9576	0.8985
Epoch 20	0.9066	0.8788	0.9425	0.9091	0.9549	0.9015
Epoch 21	0.9322	0.8848	0.9537	0.9045	0.9542	0.9106
Epoch 22	0.9406	0.8955	0.9383	0.9152	0.9589	0.9091
Epoch 23	0.9338	0.9030	0.9576	0.9000	0.9714	0.8939
Epoch 24	0.9361	0.9015	0.9656	0.9167	0.9657	0.9106
Epoch 25	0.9459	0.9015	0.9633	0.8939	0.9768	0.9015
Epoch 26	0.9468	0.9106	0.9589	0.9152	0.9637	0.8879
Epoch 27	0.9572	0.9076	0.9682	0.8909	0.9564	0.8864
Epoch 28	0.9587	0.9061	0.9572	0.9106	0.9657	0.8424
Epoch 29	0.9633	0.9152	0.9533	0.9015	0.9580	0.9106
Epoch 30	0.9578	0.9136	0.9705	0.9106	0.9699	0.9121
AVG.	0.8035	0.8093	0.8261	0.8078	0.8449	0.8250
PRED,	100%		98.84%		100%	