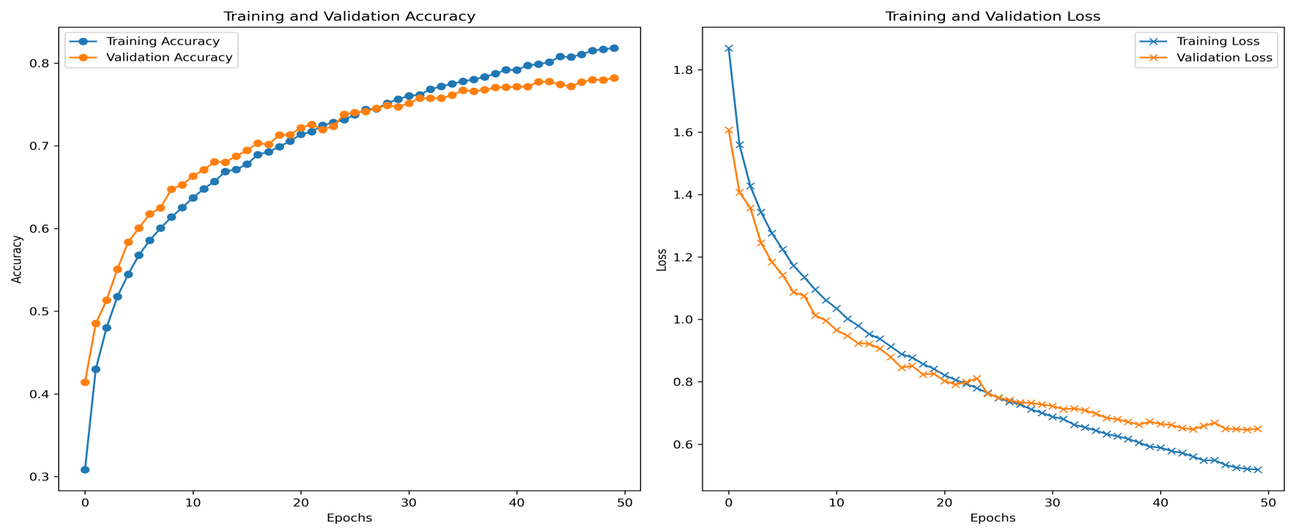
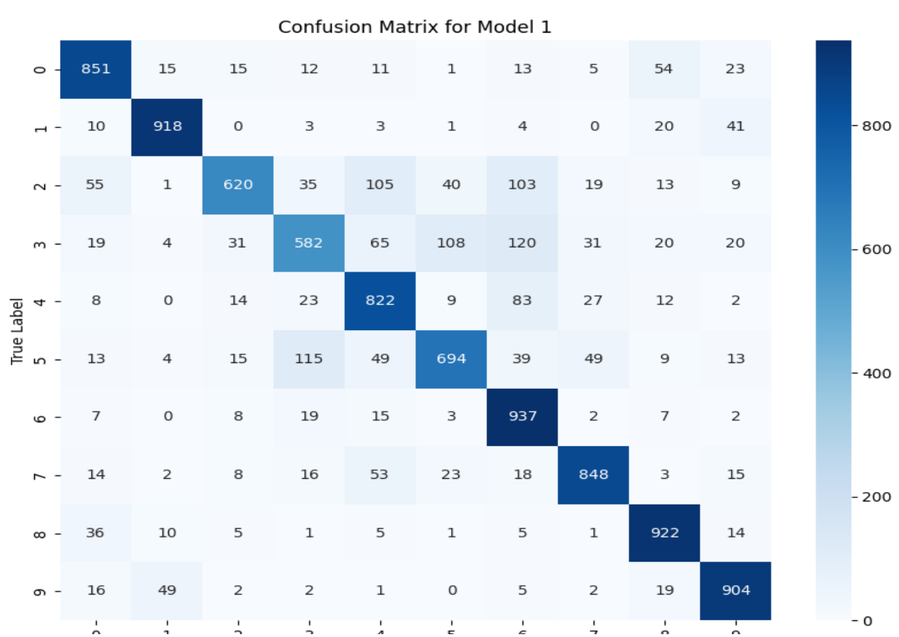
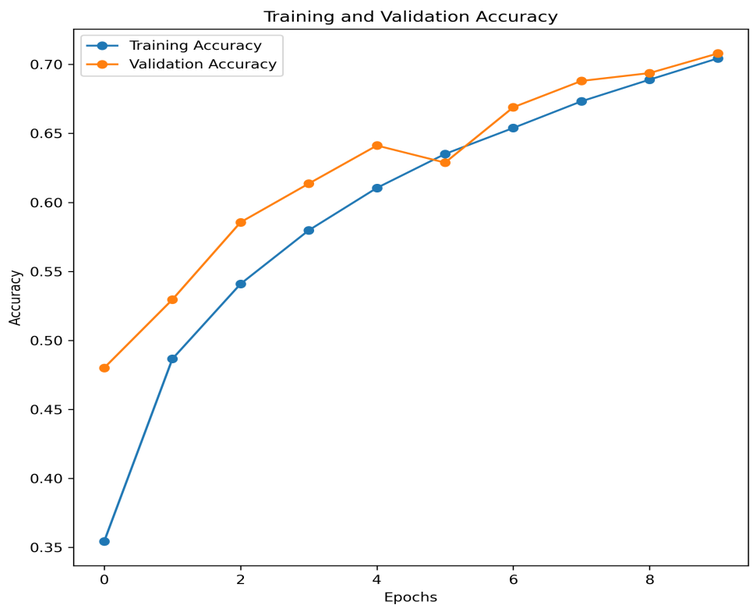
epoch	accuracy	loss	val_accuracy	val_loss
0	0.30852	1.868977	0.414299995	1.60741
1	0.42992	1.559516	0.485100001	1.407331
2	0.48008	1.427898	0.513300002	1.357435
3	0.51766	1.343496	0.550800025	1.244957
4	0.54452	1.276307	0.583599985	1.183994
5	0.56788	1.224228	0.600499988	1.1419
6	0.5857	1.172296	0.617399991	1.087371
7	0.60042	1.135144	0.625	1.075663
8	0.61366	1.095953	0.647599995	1.012829
9	0.6252	1.061311	0.652700007	0.996083
10	0.63696	1.035071	0.663299978	0.965413
11	0.64794	1.002202	0.67110002	0.947443
12	0.65682	0.979743	0.680599988	0.923326
13	0.66888	0.953039	0.680100024	0.921547
14	0.67134	0.937607	0.6875	0.906473
15	0.67764	0.913598	0.694500029	0.879554
16	0.68932	0.888982	0.703100026	0.845719
17	0.69266	0.8776	0.701499999	0.850954
18	0.6989	0.856971	0.712899983	0.823574
19	0.70564	0.841669	0.713199973	0.82575
20	0.71388	0.821062	0.721800029	0.802678
21	0.7169	0.806309	0.725799978	0.791439
22	0.72462	0.793643	0.719600022	0.799092
23	0.72812	0.779701	0.72359997	0.811314
24	0.73144	0.763939	0.737999976	0.761905
25	0.7374	0.748189	0.7403	0.74951
26	0.74394	0.735968	0.741400003	0.74096
27	0.7447	0.727375	0.745299995	0.733665
28	0.75148	0.711926	0.749000013	0.732118
29	0.7564	0.700398	0.746999979	0.727419
30	0.76028	0.688216	0.751399994	0.72252
31	0.76164	0.680618	0.757600009	0.712238
32	0.76826	0.662358	0.757499993	0.714576
33	0.77182	0.6539	0.757499993	0.708533
34	0.7748	0.644031	0.761099994	0.698182
35	0.77798	0.632473	0.767099977	0.68405
36	0.7802	0.625447	0.765999973	0.679928
37	0.7831	0.617167	0.7676	0.67143
38	0.78714	0.60546	0.770399988	0.662686
39	0.79178	0.592079	0.770900011	0.672154
40	0.79164	0.589188	0.771300018	0.664997
41	0.79724	0.578043	0.771499991	0.661508
42	0.7987	0.571966	0.777400017	0.651701
43	0.80112	0.560591	0.777700007	0.647717
44	0.80792	0.548002	0.774299979	0.658374

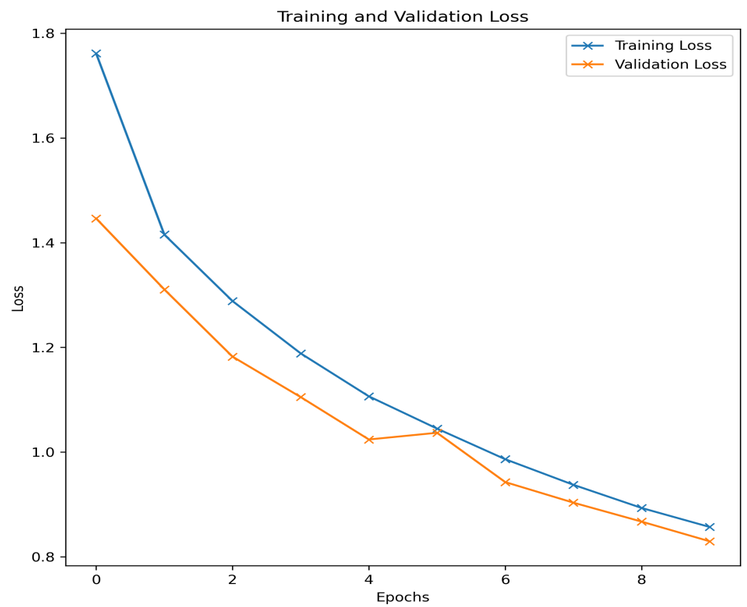


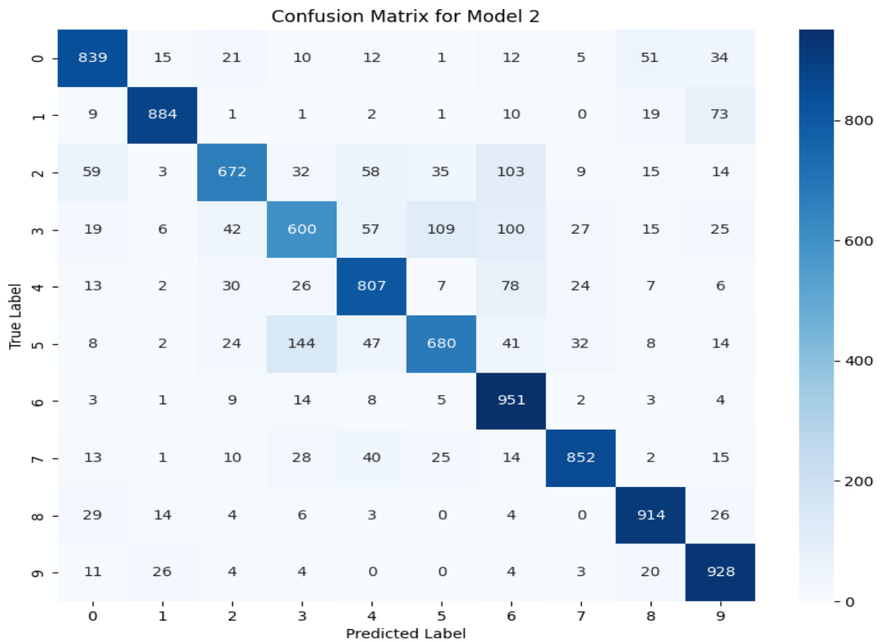


45	0.80718	0.548481	0.771700025	0.668807
46	0.8105	0.533901	0.777100027	0.649483
47	0.81492	0.525254	0.779799998	0.648653
48	0.8167	0.520971	0.779600024	0.645921
49	0.81798	0.518724	0.782000005	0.649484

	accuracy	loss	val_accurac	val_loss
0	0.35442	1.761336	0.4801	1.446212
1	0.4866	1.415312	0.5296	1.310543
2	0.54092	1.288372	0.5856	1.182221
3	0.57976	1.188401	0.6136	1.104954
4	0.6105	1.106351	0.6412	1.023933
5	0.63508	1.044743	0.6288	1.036722
6	0.65392	0.986262	0.6689	0.942575
7	0.67324	0.937385	0.688	0.903244
8	0.68894	0.893138	0.6937	0.867057
9	0.70434	0.856733	0.7079	0.829382

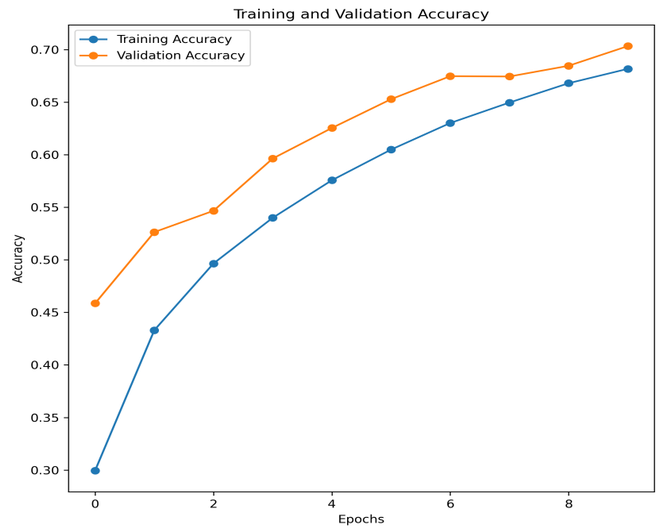


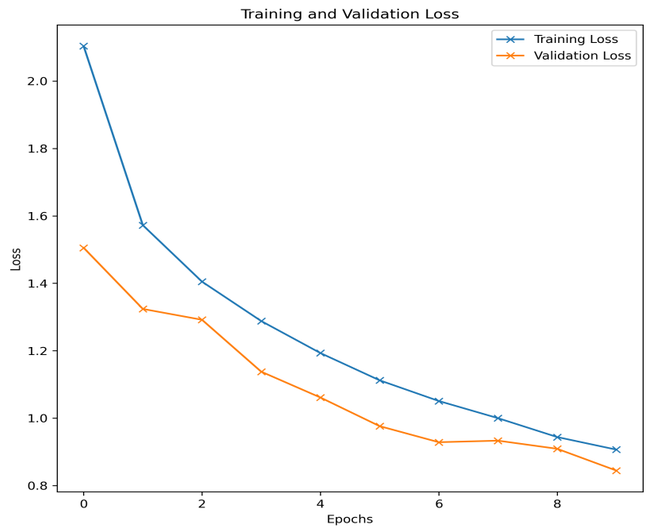


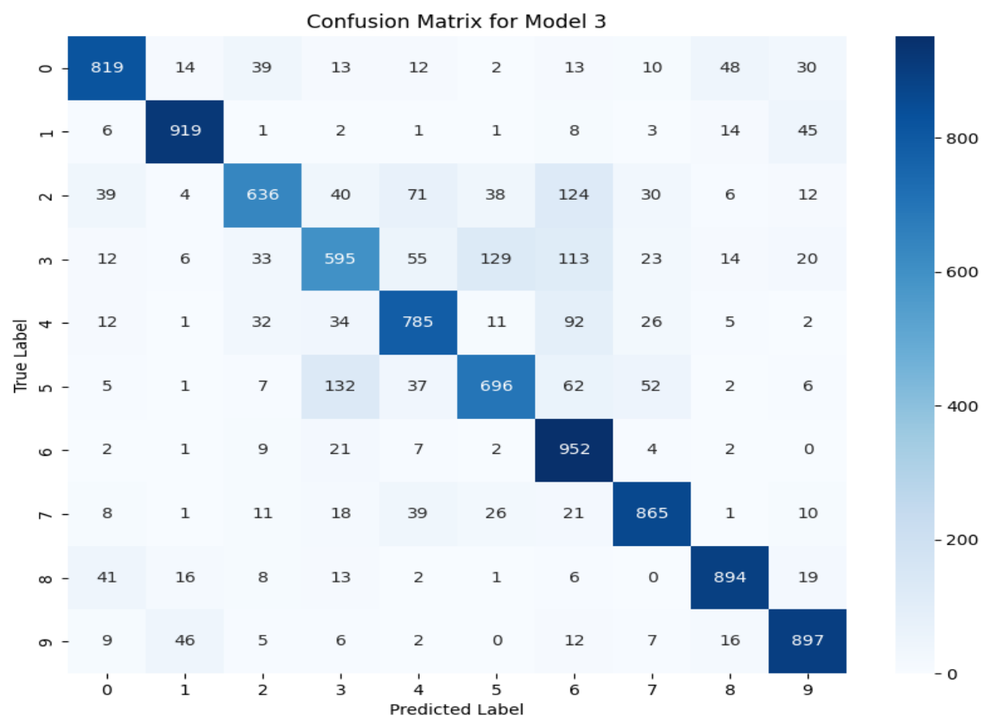


	accuracy	loss	val_accuracy	val_loss
0	0.299459994	2.103229761	0.458600014	1.505313516
1	0.433019996	1.572269797	0.52640003	1.324000597
2	0.49654001	1.404828668	0.546700001	1.291805983
3	0.540000021	1.288100123	0.596400023	1.137952328
4	0.57573998	1.193178535	0.625500023	1.061377168
5	0.60492003	1.112384558	0.652899981	0.976512671
6	0.630219996	1.051001668	0.674799979	0.928808153
7	0.649699986	1.000161409	0.674499989	0.933422625
8	0.668099999	0.944141448	0.684700012	0.909327388
9	0.681779981	0.906801403	0.703400016	0.844723046

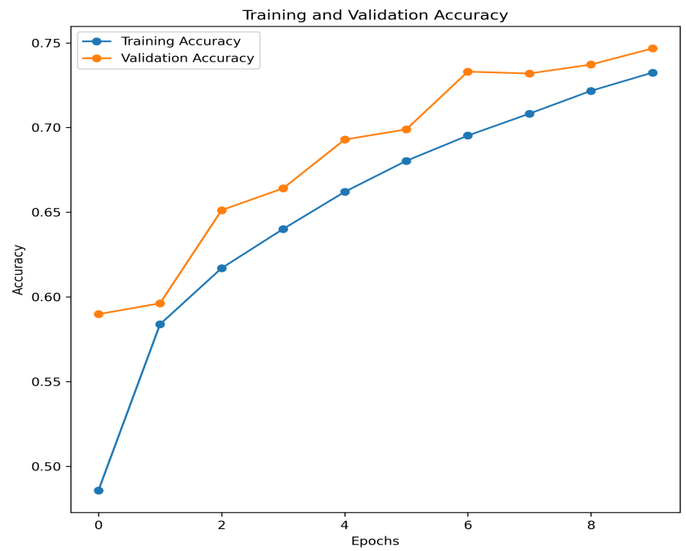
#VAL

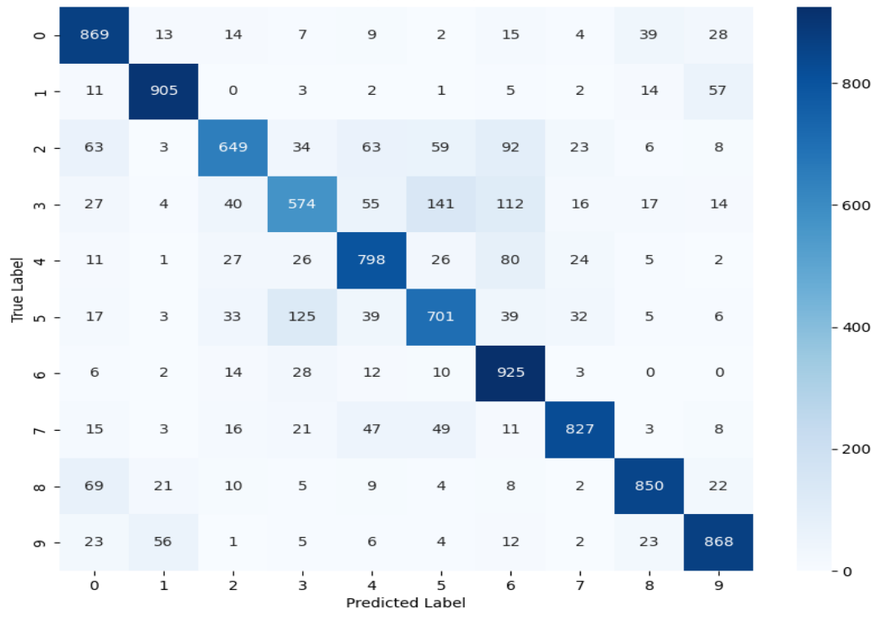




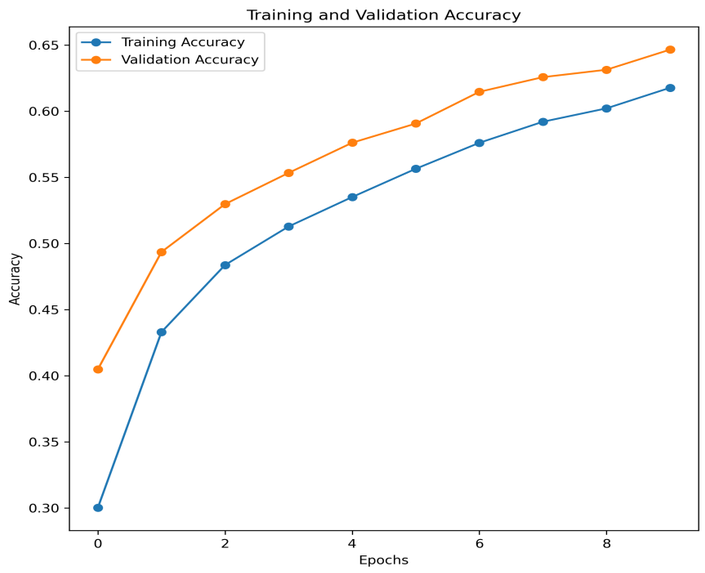


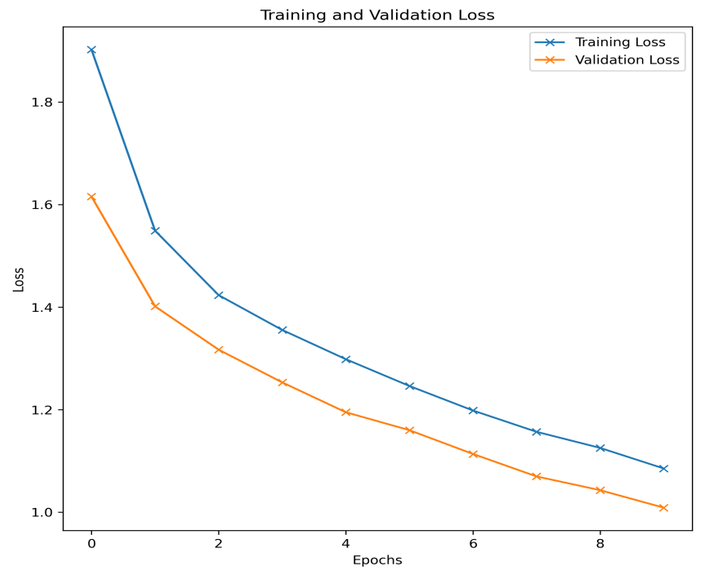
	accuracy	loss	val_accurac	val_loss
0	0.48572	1.454582	0.5898	1.182381
1	0.58382	1.197282	0.5962	1.130685
2	0.61696	1.103351	0.6512	1.001327
3	0.6401	1.035627	0.6641	0.961269
4	0.66202	0.977254	0.6929	0.887082
5	0.68032	0.916643	0.6989	0.881155
6	0.69524	0.879363	0.733	0.780119
7	0.7082	0.8373	0.7319	0.79241
8	0.72166	0.80392	0.7372	0.772945
9	0.73242	0.773881	0.7467	0.750187

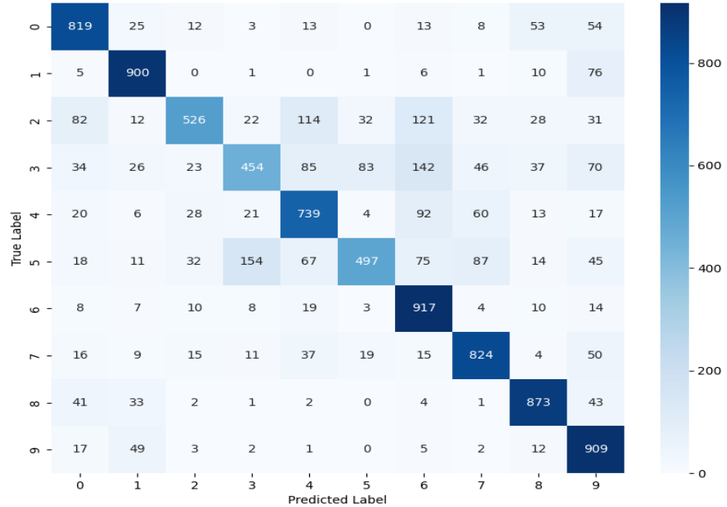




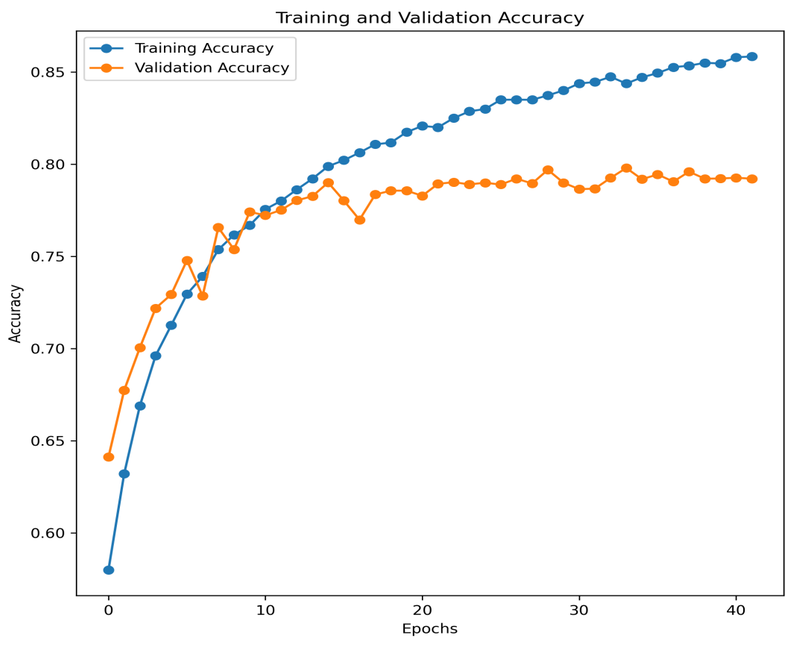
	accuracy	loss	val_accurac	val_loss
0	0.30016	1.902063	0.4048	1.615563
1	0.43296	1.548978	0.4935	1.40146
2	0.48364	1.423313	0.5297	1.316956
3	0.51276	1.355398	0.5533	1.253162
4	0.53504	1.298407	0.5761	1.194994
5	0.5564	1.246202	0.5906	1.16002
6	0.57604	1.198361	0.6146	1.113647
7	0.59198	1.156838	0.6257	1.069814
8	0.6021	1.125437	0.6313	1.043007
9	0.61768	1.085366	0.6465	1.008955

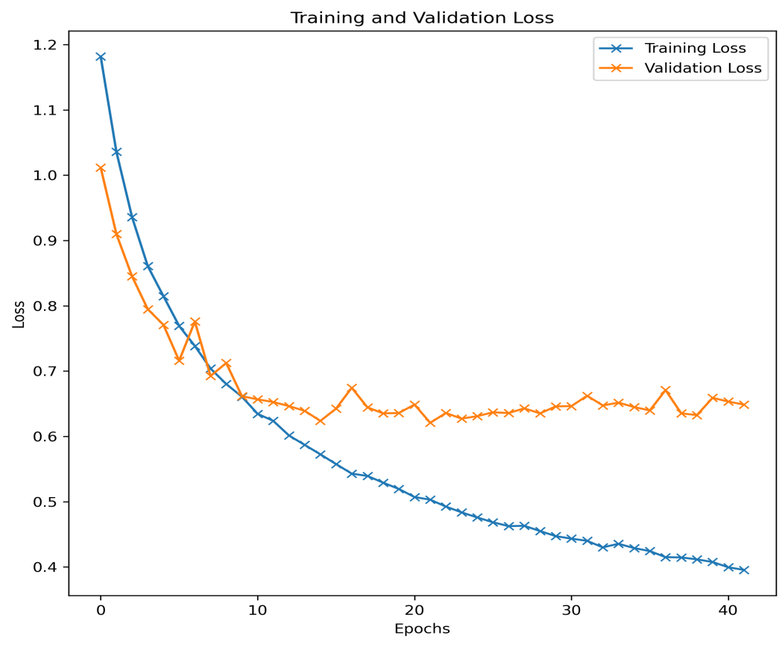


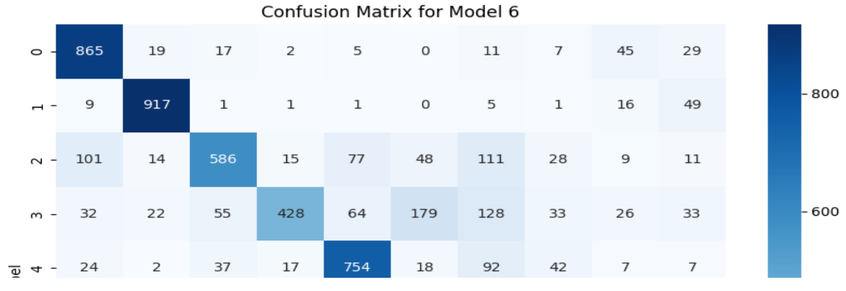


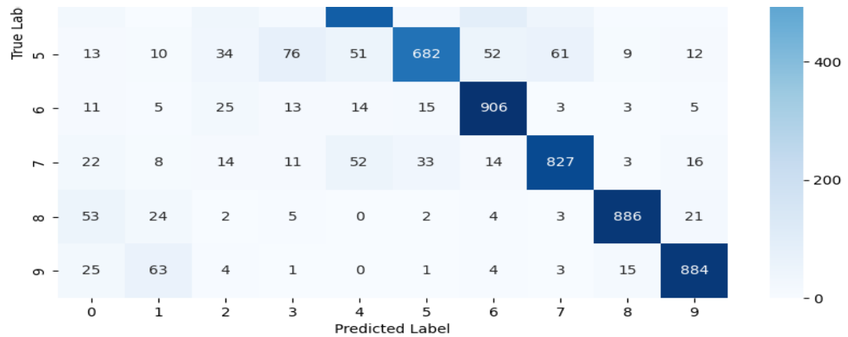


	accuracy	loss	val_accurac	val_loss
0	0.5799	1.181653	0.6411	1.011784
1	0.63204	1.035838	0.6773	0.909846
2	0.66888	0.93573	0.7004	0.845021
3	0.696	0.860702	0.7218	0.794802
4	0.7126	0.814665	0.7293	0.770766
5	0.72946	0.76913	0.7478	0.715919
6	0.73908	0.738486	0.7285	0.775917
7	0.7536	0.703908	0.7656	0.692417
8	0.76164	0.680202	0.7537	0.712329
9	0.76682	0.660758	0.7741	0.661551
10	0.7755	0.634537	0.7722	0.656705
11	0.78004	0.623685	0.7751	0.652552
12	0.78618	0.601353	0.7803	0.646385
13	0.79206	0.586957	0.7826	0.639106
14	0.79884	0.572507	0.79	0.623693
15	0.80208	0.557551	0.7802	0.642462
16	0.80626	0.542963	0.7698	0.674486
17	0.81072	0.53938	0.7835	0.644393
18	0.81168	0.52915	0.7856	0.635238
19	0.81734	0.519483	0.7856	0.635782
20	0.8207	0.507084	0.7828	0.648684
21	0.81994	0.503027	0.7893	0.620788
22	0.82496	0.4925	0.7902	0.635777
23	0.82862	0.483639	0.789	0.627186
24	0.82988	0.475818	0.7899	0.630957
25	0.8349	0.46848	0.7889	0.636857
26	0.83496	0.462499	0.7921	0.635771
27	0.83488	0.463091	0.7895	0.642945
28	0.83728	0.454964	0.7969	0.635183
29	0.83996	0.447252	0.7899	0.645922
30	0.84376	0.443373	0.7864	0.646371
31	0.8445	0.44002	0.7867	0.662194
32	0.84736	0.430054	0.7925	0.647386
33	0.84368	0.435481	0.7979	0.651672
34	0.84706	0.42891	0.7918	0.644838
35	0.84938	0.424316	0.7944	0.639738
36	0.85258	0.415046	0.7905	0.670905
37	0.85338	0.41462	0.7959	0.635232
38	0.85494	0.41165	0.7921	0.6326
39	0.8546	0.407576	0.7922	0.659017
40	0.85798	0.399512	0.7926	0.653262
41	0.85834	0.395512	0.7921	0.648641

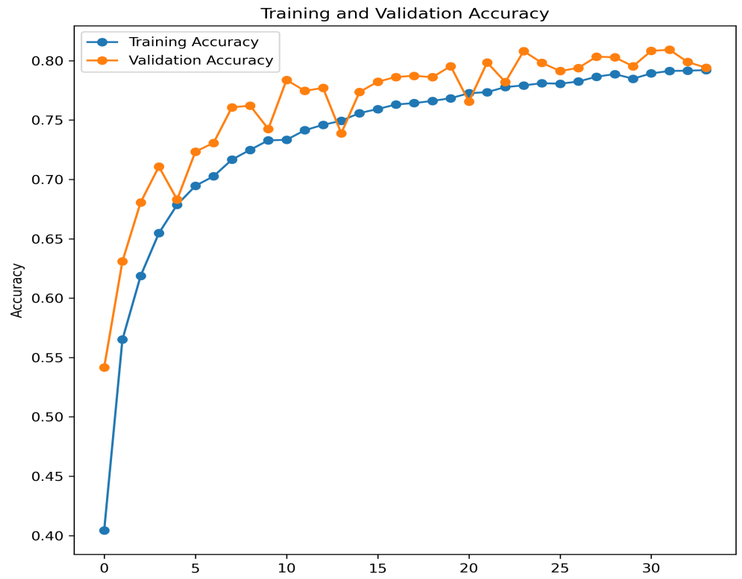


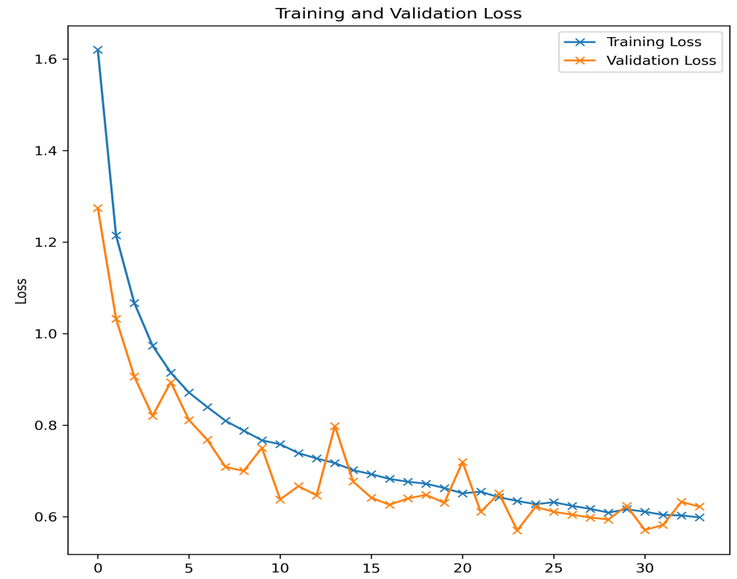


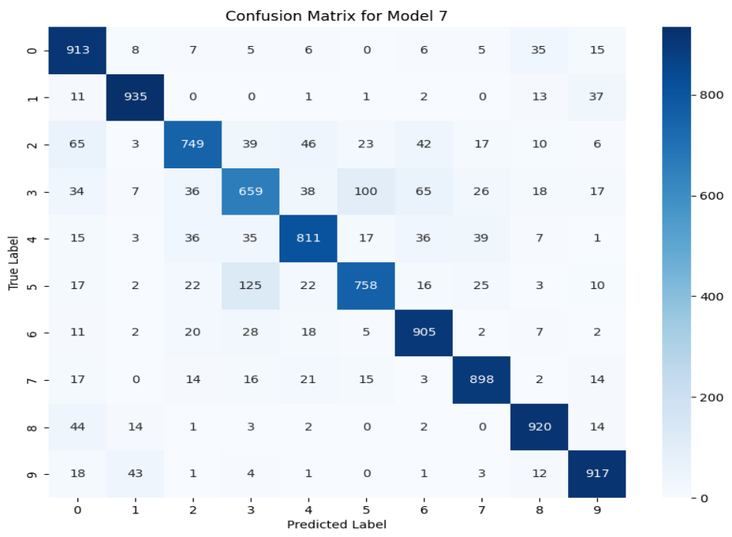



True Lab
5 13 10 34 76 51 682 52 61 9 12
6 11 5 25 13 14 15 906 3 3 5
7 22 8 14 11 52 33 14 827 3 16
8 53 24 2 5 0 2 4 3 886 21
9 25 63 4 1 0 1 4 3 15 884
0 1 2 3 4 5 6 7 8 9
Predicted Label
400
200
0

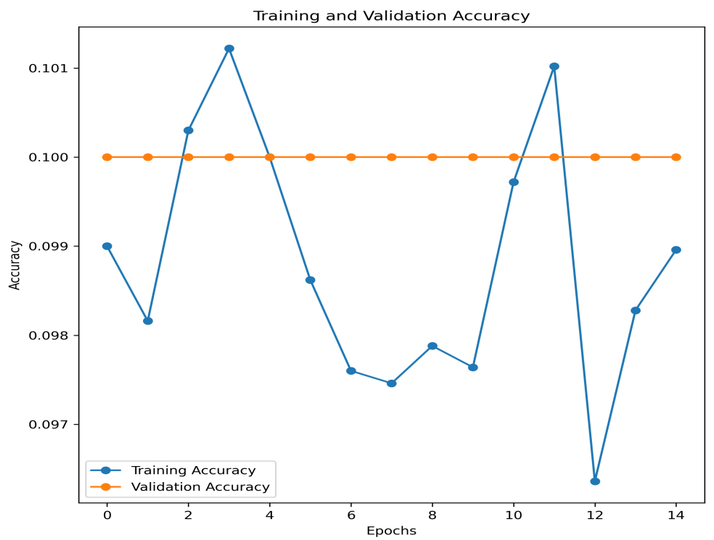
	accuracy	loss	val_accurac	val_loss
0	0.40436	1.61992	0.5417	1.274472
1	0.56506	1.21439	0.631	1.032072
2	0.61878	1.067006	0.6807	0.906236
3	0.65472	0.97375	0.7108	0.819998
4	0.67864	0.914744	0.683	0.893793
5	0.69456	0.87098	0.7233	0.810909
6	0.70268	0.839668	0.7308	0.768032
7	0.7166	0.8096	0.7606	0.708673
8	0.72492	0.787953	0.7622	0.699759
9	0.7329	0.766759	0.7425	0.75047
10	0.73336	0.758241	0.7838	0.637763
11	0.74142	0.738852	0.7746	0.666611
12	0.74596	0.727199	0.7771	0.64637
13	0.7494	0.717136	0.7388	0.798221
14	0.75586	0.701528	0.7736	0.67666
15	0.75928	0.692858	0.7823	0.641383
16	0.76312	0.682364	0.7863	0.625888
17	0.76426	0.676376	0.7873	0.639923
18	0.76614	0.672033	0.7861	0.647696
19	0.7684	0.66246	0.7954	0.630204
20	0.7726	0.65101	0.7656	0.719424
21	0.77352	0.654508	0.7985	0.610537
22	0.7778	0.642275	0.782	0.650836
23	0.7792	0.634302	0.8081	0.570103
24	0.78102	0.627239	0.7982	0.621202
25	0.78064	0.631527	0.7913	0.610835
26	0.78244	0.623644	0.7939	0.604314
27	0.78654	0.617115	0.8034	0.598255
28	0.78872	0.608896	0.8029	0.59369
29	0.78486	0.616168	0.7953	0.623586
30	0.7893	0.610756	0.8083	0.570795
31	0.79136	0.603962	0.8092	0.581975
32	0.7916	0.602604	0.7989	0.632237
33	0.79208	0.598451	0.7941	0.621885

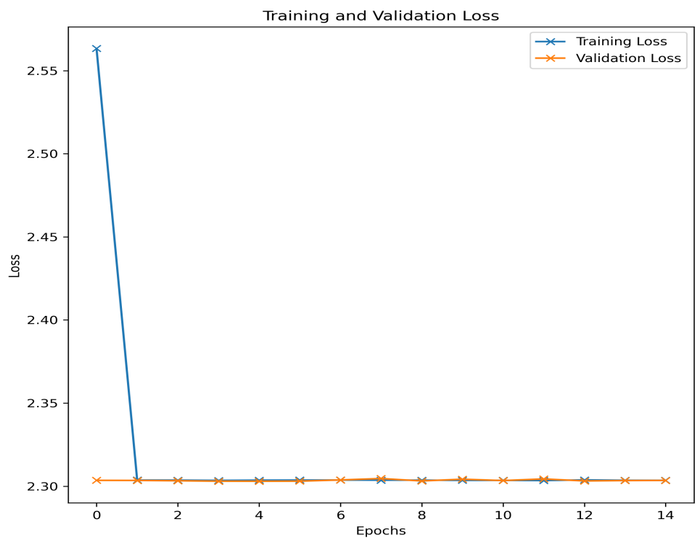


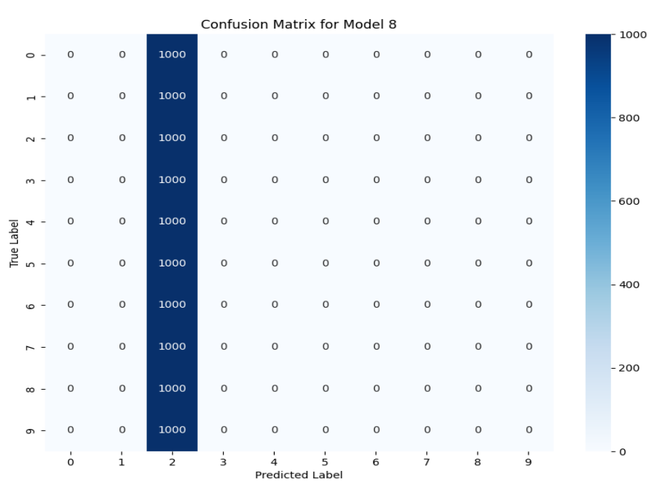




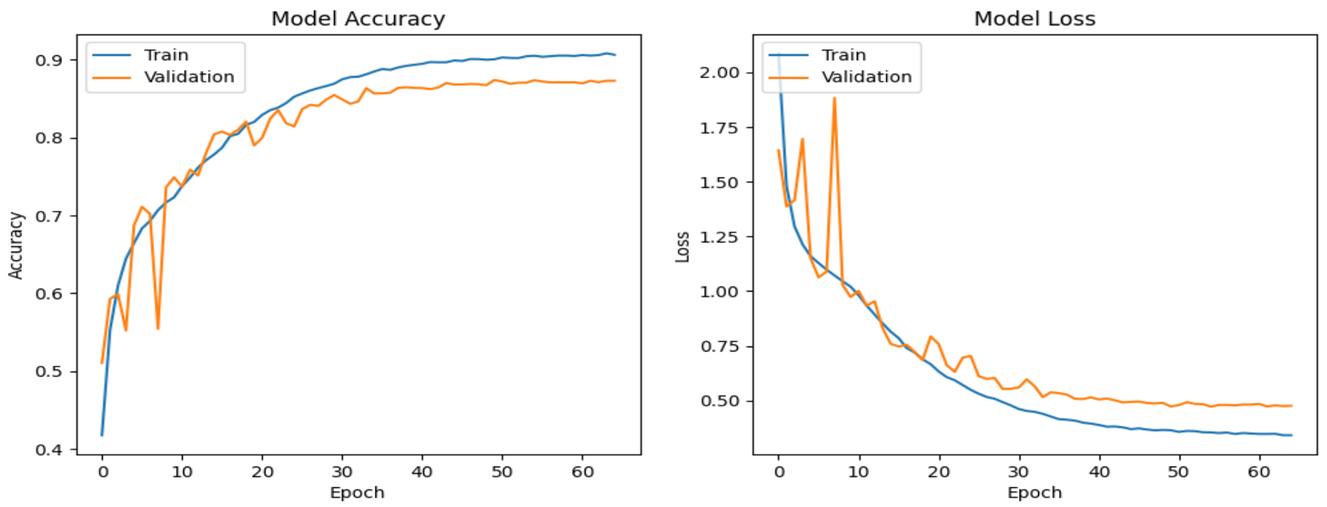
	accuracy	loss	val_accurac	val_loss
0	0.099	2.563324	0.1	2.303498
1	0.09816	2.30366	0.1	2.303445
2	0.1003	2.303621	0.1	2.303247
3	0.10122	2.303462	0.1	2.302993
4	0.1	2.303595	0.1	2.302965
5	0.09862	2.303646	0.1	2.303011
6	0.0976	2.303678	0.1	2.303736
7	0.09746	2.303607	0.1	2.304588
8	0.09788	2.303612	0.1	2.303129
9	0.09764	2.303491	0.1	2.304178
10	0.09972	2.303483	0.1	2.303373
11	0.10102	2.303375	0.1	2.304339
12	0.09636	2.303754	0.1	2.303149
13	0.09828	2.303541	0.1	2.303367
14	0.09896	2.303505	0.1	2.30346







	loss	accuracy	val_loss	val_accurac	lr
0	2.086653	0.41772	1.643627	0.5107	0.001
1	1.480265	0.5522	1.386674	0.5927	0.001
2	1.295596	0.60978	1.415724	0.599	0.001
3	1.213722	0.64462	1.695691	0.5523	0.001
4	1.160025	0.66454	1.150619	0.6872	0.001
5	1.128172	0.68338	1.062832	0.7111	0.001
6	1.098051	0.69308	1.089106	0.7019	0.001
7	1.071277	0.70684	1.882813	0.5544	0.001
8	1.045043	0.71676	1.028549	0.7362	0.001
9	1.02018	0.72324	0.973129	0.7489	0.001
10	0.980896	0.73766	1.001077	0.737	0.000905
11	0.93422	0.74874	0.933248	0.7587	0.000819
12	0.893054	0.76152	0.953349	0.7514	0.000741
13	0.852108	0.77102	0.830758	0.7803	0.00067
14	0.814827	0.77832	0.758879	0.8042	0.000607
15	0.78496	0.78708	0.747023	0.8078	0.000549
16	0.73997	0.80196	0.754492	0.8034	0.000497
17	0.718999	0.80484	0.722157	0.8102	0.000449
18	0.688116	0.81628	0.684526	0.8205	0.000407
19	0.665591	0.82014	0.792852	0.79	0.000368
20	0.632537	0.82914	0.757735	0.7997	0.000333
21	0.606776	0.83526	0.661922	0.8243	0.000301
22	0.592521	0.83854	0.630792	0.8353	0.000273
23	0.570566	0.84442	0.696077	0.8185	0.000247
24	0.548595	0.85254	0.703681	0.8144	0.000223
25	0.530859	0.8567	0.610822	0.8365	0.000202
26	0.516033	0.86054	0.598896	0.8421	0.000183
27	0.507786	0.86356	0.602489	0.8407	0.000165
28	0.492411	0.86624	0.55223	0.8488	0.00015
29	0.477691	0.86926	0.553329	0.8547	0.000135
30	0.461001	0.87488	0.559411	0.8491	0.000122
31	0.452091	0.8777	0.596621	0.8434	0.000111
32	0.447929	0.8782	0.564202	0.8465	0.0001
33	0.438986	0.88134	0.515111	0.8635	9.07E-05
34	0.42679	0.88492	0.537392	0.8567	8.21E-05
35	0.414637	0.88814	0.533484	0.8568	7.43E-05
36	0.412062	0.88708	0.526996	0.8577	6.72E-05
37	0.408114	0.89014	0.507994	0.864	6.08E-05
38	0.398833	0.8922	0.506482	0.8647	5.50E-05
39	0.394033	0.8935	0.514047	0.8638	4.98E-05
40	0.388232	0.89482	0.504862	0.8637	4.50E-05
41	0.380152	0.89708	0.508757	0.8623	4.08E-05
42	0.381232	0.89672	0.500949	0.8644	3.69E-05
43	0.377201	0.8968	0.491262	0.8701	3.34E-05
44	0.369114	0.89908	0.493607	0.8682	3.02E-05



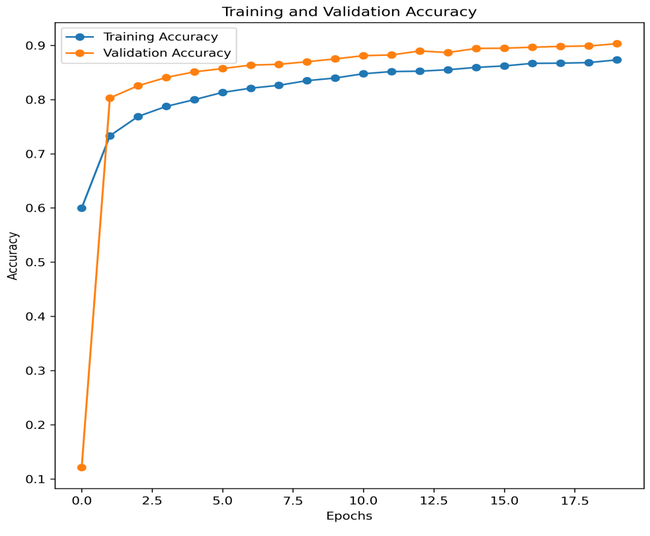
45	0.372385	0.89842	0.495116	0.8683	2.73E-05
46	0.367336	0.90096	0.488407	0.8689	2.47E-05
47	0.363383	0.90088	0.48627	0.8686	2.24E-05
48	0.365274	0.90008	0.488585	0.8673	2.02E-05
49	0.363709	0.90064	0.472618	0.874	1.83E-05
50	0.356368	0.903	0.479168	0.872	1.66E-05
51	0.36082	0.90234	0.492287	0.8691	1.50E-05
52	0.359796	0.9022	0.48441	0.8705	1.36E-05
53	0.3546	0.90448	0.483087	0.8706	1.23E-05
54	0.353965	0.90514	0.471881	0.8737	1.11E-05
55	0.350984	0.90382	0.479561	0.8721	1.01E-05
56	0.353428	0.90456	0.479386	0.871	9.10E-06
57	0.346861	0.90532	0.477608	0.8711	8.23E-06
58	0.351208	0.90536	0.48133	0.871	7.45E-06
59	0.348972	0.90482	0.481136	0.8711	6.74E-06
60	0.347036	0.90608	0.484267	0.8697	6.10E-06
61	0.346951	0.90536	0.472801	0.873	5.52E-06
62	0.347659	0.906	0.477507	0.8712	4.99E-06
63	0.341242	0.90822	0.474645	0.873	4.52E-06
64	0.341161	0.9064	0.47575	0.873	4.09E-06

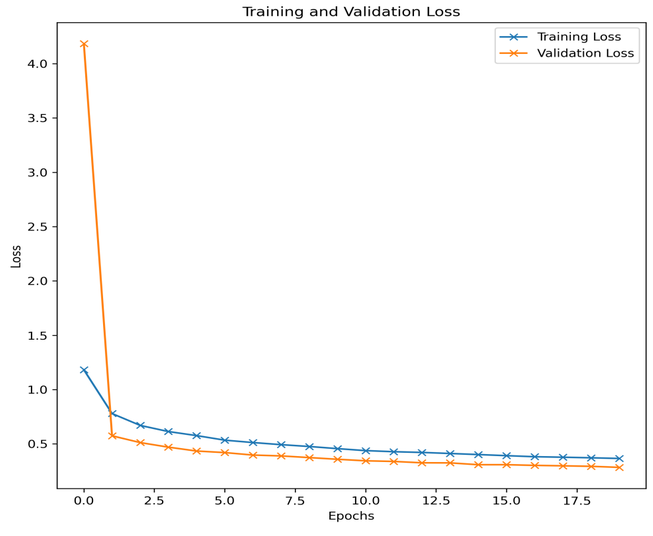
	1	2	3	4	5	6	7	8	9
Test Accura	76.83	80.6	77.51	75.91	76.31	79.58	82.1	9.78012	81.6

CIFAR-10

epoch	loss	accuracy	val_loss	val_accurac	lr
0	1.181582	0.59995	4.183175	0.1214	0.001
1	0.77883	0.73315	0.573937	0.8029	0.001
2	0.669667	0.76875	0.511477	0.8255	0.001
3	0.613103	0.787325	0.4694	0.8407	0.001
4	0.575809	0.799825	0.433814	0.8511	0.001
5	0.533789	0.813125	0.419466	0.8571	0.001
6	0.511848	0.8209	0.396712	0.8635	0.001
7	0.49244	0.826275	0.38877	0.865	0.001
8	0.47554	0.83485	0.373414	0.8697	0.001
9	0.455792	0.8397	0.357868	0.875	0.001
10	0.437525	0.8476	0.343782	0.8809	0.001
11	0.427556	0.8516	0.337985	0.8823	0.001
12	0.420782	0.8523	0.325376	0.8896	0.001
13	0.411127	0.854975	0.324602	0.8867	0.001
14	0.401286	0.8593	0.307753	0.8943	0.001
15	0.391094	0.862	0.307875	0.8947	0.001
16	0.381328	0.86675	0.30168	0.8966	0.001
17	0.376787	0.8671	0.297632	0.898	0.001
18	0.371468	0.86815	0.292928	0.8988	0.001
19	0.365324	0.87315	0.283373	0.903	0.001

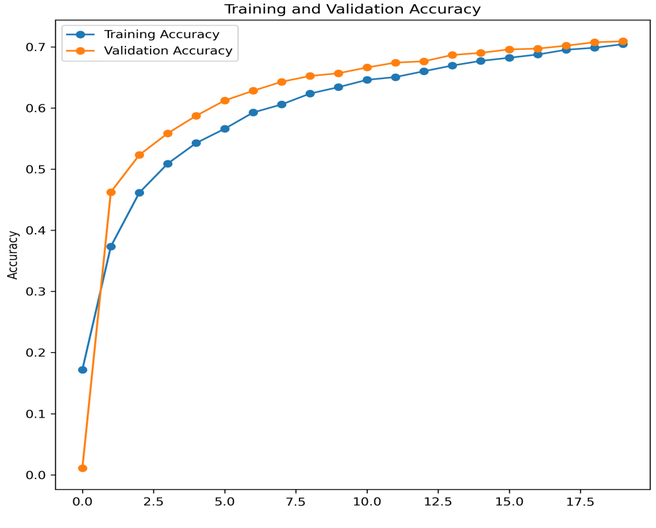
Test Accuracy: 80.7999643

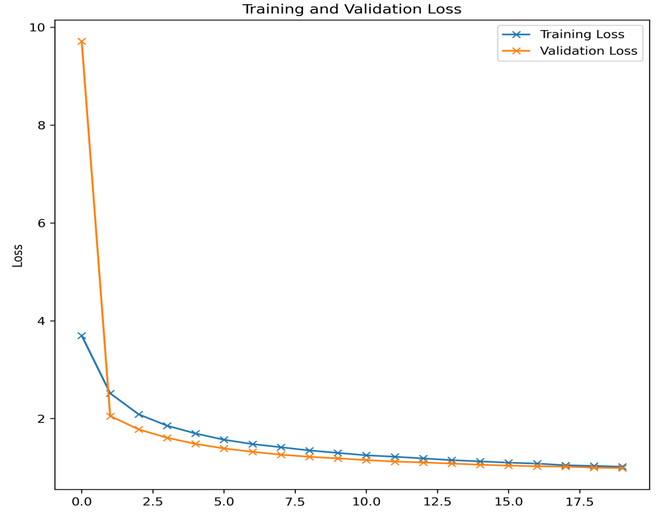




CIFAR-100

epoch	loss	accuracy	val_loss	val_accurac	lr
0	3.698287	0.172	9.712999	0.011	0.001
1	2.516836	0.373375	2.051518	0.4625	0.001
2	2.086947	0.4614	1.779468	0.5231	0.001
3	1.854909	0.509025	1.607452	0.5586	0.001
4	1.695068	0.5427	1.482708	0.5873	0.001
5	1.567558	0.56595	1.388891	0.6122	0.001
6	1.478714	0.59255	1.32059	0.6281	0.001
7	1.414008	0.605775	1.261809	0.6428	0.001
8	1.348232	0.62355	1.218505	0.6523	0.001
9	1.298589	0.63405	1.186586	0.6568	0.001
10	1.249238	0.645975	1.151635	0.6662	0.001
11	1.220224	0.650525	1.12104	0.6742	0.001
12	1.185665	0.660075	1.103277	0.6763	0.001
13	1.150597	0.6694	1.080154	0.6867	0.001
14	1.124769	0.676975	1.056699	0.6901	0.001
15	1.098687	0.682125	1.038845	0.6958	0.001
16	1.079519	0.6874	1.025033	0.6971	0.001
17	1.045909	0.6952	1.016951	0.7019	0.001
18	1.031858	0.6985	0.998099	0.7075	0.001
19	1.015826	0.704325	0.987447	0.709	0.001



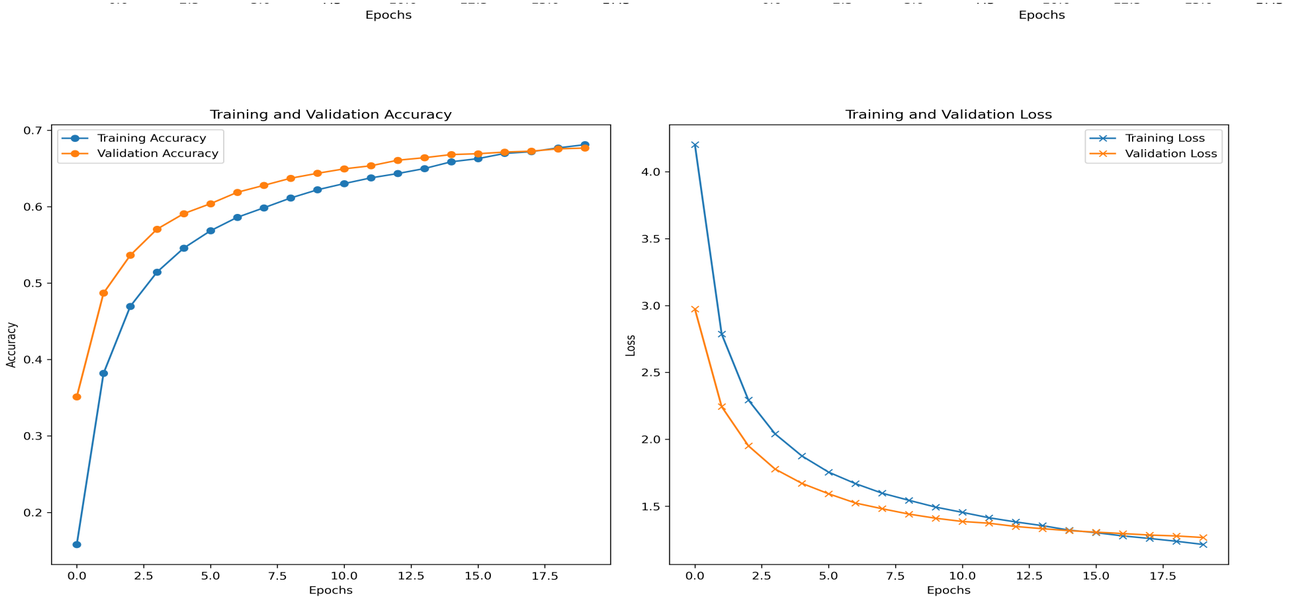


Test Accuracy: 70.89999924

Tiny ImageNet

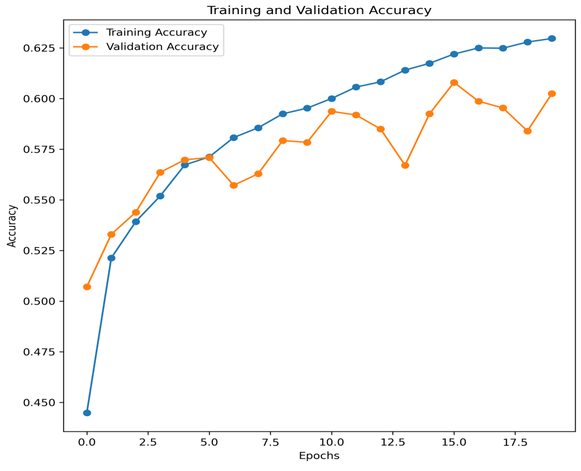
epoch	accuracy	loss	val_accurac	val_loss	learning_rate
0	0.158025	4.202401	0.3513	2.973424	0.001
1	0.381938	2.786803	0.48695	2.244212	0.001
2	0.4696	2.293401	0.53645	1.951048	0.001
3	0.514462	2.039753	0.57065	1.777125	0.001
4	0.545862	1.875387	0.59095	1.670569	0.001
5	0.56855	1.754243	0.604	1.592483	0.001
6	0.586125	1.668759	0.61885	1.52356	0.001
7	0.598638	1.597072	0.628	1.480769	0.001
8	0.611462	1.543978	0.6373	1.440792	0.001
9	0.622187	1.492935	0.64375	1.409775	0.001
10	0.630288	1.45369	0.64955	1.385602	0.001
11	0.637762	1.413169	0.6536	1.372363	0.001
12	0.643412	1.381884	0.66085	1.347997	0.001
13	0.64995	1.354231	0.66415	1.33138	0.001
14	0.6588	1.32045	0.66825	1.316782	0.001
15	0.662912	1.301649	0.66935	1.305653	0.001
16	0.66975	1.277624	0.6715	1.295216	0.001
17	0.672025	1.258541	0.6727	1.284121	0.001
18	0.677025	1.23752	0.67575	1.277311	0.001
19	0.6812	1.213755	0.67675	1.265626	0.001

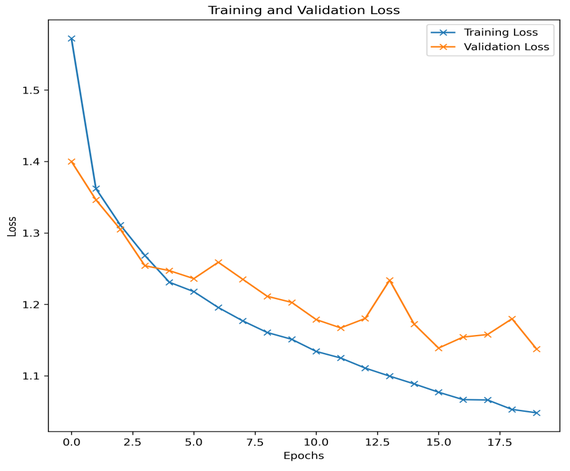
Test Accuracy: 0.681400001



CIFAR-10

	loss	accuracy	val_loss	val_accuracy
0	1.572048783	0.444880009	1.3999542	0.507099986
1	1.362035275	0.521300018	1.346340179	0.532999992
2	1.310919404	0.539300025	1.304970145	0.543900013
3	1.268398404	0.551940024	1.254093647	0.563600004
4	1.230988145	0.567260027	1.247232318	0.569800019
5	1.217793941	0.571200013	1.236005425	0.570900023
6	1.195585489	0.580780029	1.25893259	0.557200015
7	1.176903367	0.585600019	1.235065579	0.562900007
8	1.160626054	0.592480004	1.211301088	0.579299986
9	1.151115179	0.595300019	1.20274961	0.578400016
10	1.134139657	0.600059986	1.178712249	0.593699992
11	1.12494576	0.605700016	1.1670748	0.591899991
12	1.110881448	0.608280003	1.180252314	0.584999979
13	1.09957993	0.614080012	1.233849168	0.567099988
14	1.088733077	0.617420018	1.172376037	0.592499971
15	1.077084422	0.621999979	1.138850927	0.60799998
16	1.066711068	0.625020027	1.154243112	0.598699987
17	1.066213727	0.624899983	1.157792211	0.595399976
18	1.052988887	0.627919972	1.179854631	0.583999991
19	1.048259854	0.629679978	1.137629509	0.602500021

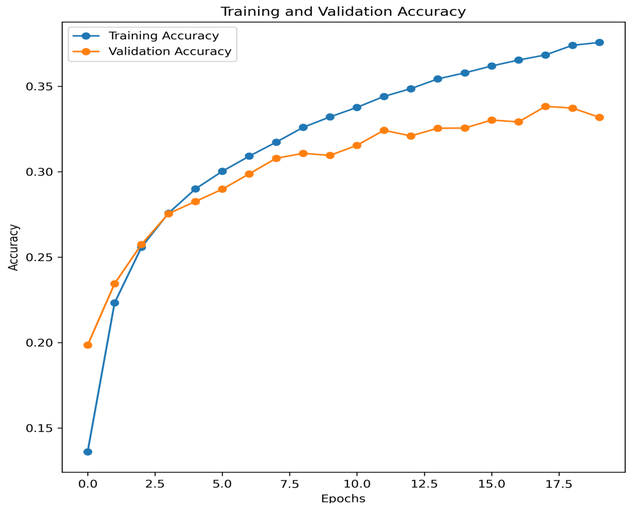


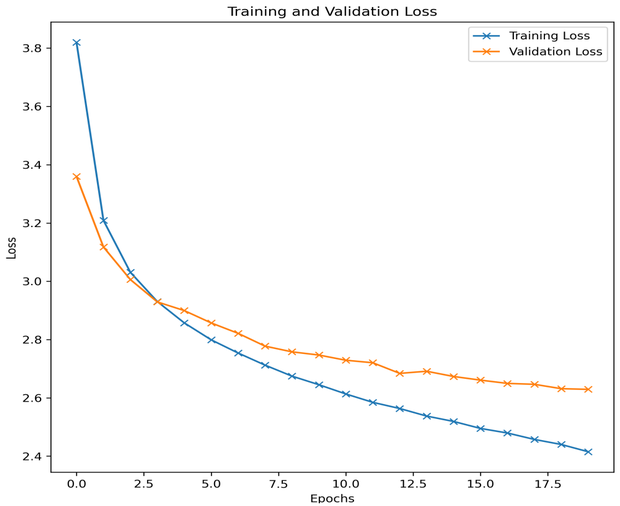


Test Accuracy: 0.6025000214576721

CIFAR-100

	loss	accuracy	val_loss	val_accuracy
0	3.819633961	0.136059999	3.359554768	0.198500007
1	3.208979368	0.223240003	3.117607355	0.234500006
2	3.030659437	0.255840003	3.005791664	0.257499993
3	2.930408478	0.275759995	2.929171562	0.2755
4	2.857232571	0.289959997	2.899418831	0.282599986
5	2.799043417	0.300280005	2.857076883	0.289799988
6	2.753788233	0.309139997	2.821300268	0.298799992
7	2.712196827	0.317339987	2.777405977	0.307900012
8	2.674483538	0.326000005	2.757798195	0.310799986
9	2.644965887	0.332139999	2.746812344	0.309599996
10	2.613269091	0.337720007	2.728945017	0.315499991
11	2.584531069	0.344119996	2.720404148	0.324299991
12	2.563369274	0.34867999	2.683916569	0.32100001
13	2.537396908	0.354380012	2.691188335	0.325500011
14	2.518936157	0.357899994	2.673247576	0.325599998
15	2.4949646	0.361959994	2.660712481	0.330300003
16	2.479243994	0.365420014	2.649483681	0.3292
17	2.457248211	0.368420005	2.646388531	0.33829999
18	2.439900637	0.374040008	2.631376028	0.337300003
19	2.414948463	0.375739992	2.62908268	0.331900001



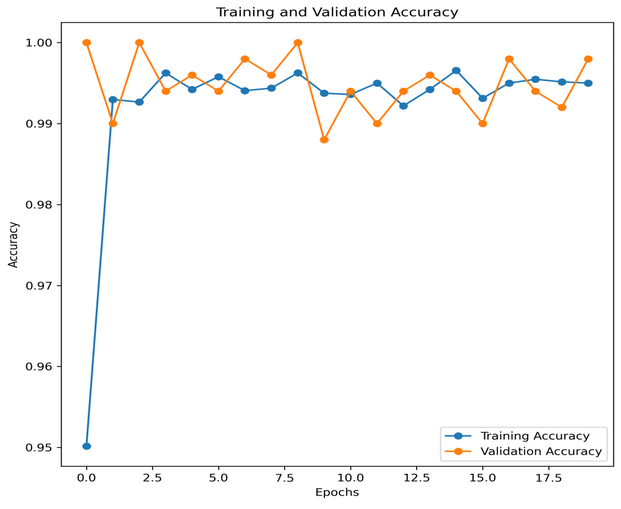


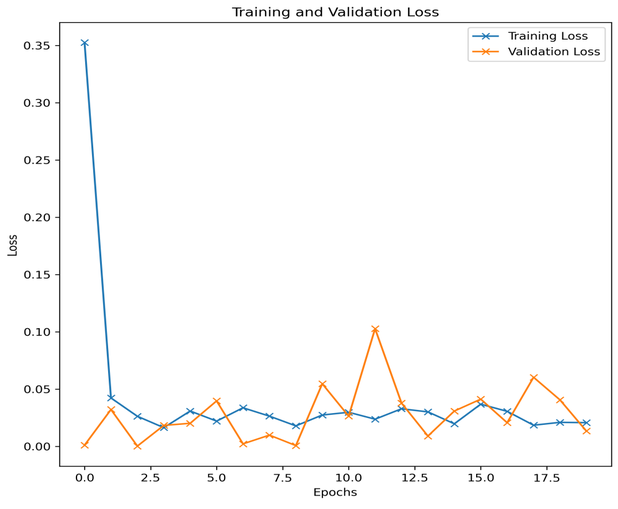
Test Accuracy: 0.3225000214576721

Tiny ImageNet

Epoch	Training Loss	Training Acc	Validation Loss	Validation Acc
0	0.352540574	0.95015625	0.00106247	1
1	0.042299408	0.99296875	0.032177482	0.99000001
2	0.026292886	0.99265625	0.000275778	1
3	0.016375794	0.99625	0.018314168	0.994000018
4	0.030866613	0.99421875	0.020182673	0.995999992
5	0.022084557	0.99578125	0.039694946	0.994000018
6	0.033713894	0.9940625	0.002224445	0.998000026
7	0.026411624	0.994375	0.009856254	0.995999992
8	0.017921652	0.99625	0.000707703	1
9	0.027400414	0.99375	0.054704152	0.987999976
10	0.029789407	0.99359375	0.026407767	0.994000018
11	0.023762562	0.995	0.102784961	0.99000001
12	0.032843102	0.9921875	0.037842583	0.994000018
13	0.030133497	0.99421875	0.009020829	0.995999992
14	0.019742059	0.9965625	0.030874576	0.994000018
15	0.036868715	0.993125	0.041246586	0.99000001
16	0.030611926	0.995	0.020674367	0.998000026
17	0.018504006	0.99546875	0.060337972	0.994000018
18	0.021002203	0.99515625	0.040599518	0.991999984
19	0.020738312	0.995	0.01337889	0.998000026

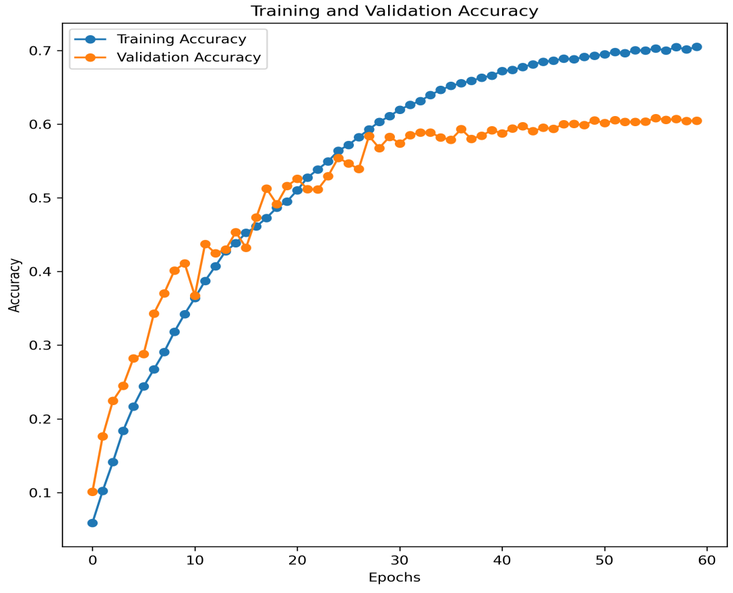
Test Accuracy: 0.9940000176429749

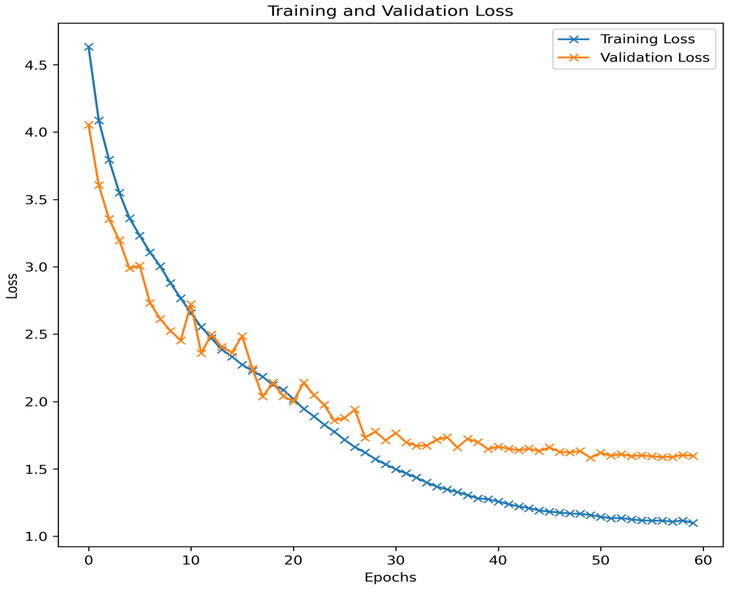




CIFAR-100

	loss	accuracy	val_loss	val_accurac	lr
0	4.631716	0.05884	4.053092	0.1009	0.001
1	4.086836	0.10216	3.606954	0.1762	0.001
2	3.794525	0.14146	3.355512	0.2246	0.001
3	3.550777	0.18388	3.197294	0.2451	0.001
4	3.360931	0.21672	2.988271	0.2822	0.001
5	3.231445	0.24398	3.008614	0.2881	0.001
6	3.108031	0.2671	2.732941	0.3429	0.001
7	3.004044	0.29068	2.612713	0.3703	0.001
8	2.879017	0.31808	2.525345	0.4013	0.001
9	2.767032	0.34222	2.453732	0.4111	0.001
10	2.657211	0.3639	2.724251	0.3672	0.001
11	2.553733	0.38736	2.358968	0.4375	0.001
12	2.47066	0.40708	2.498013	0.4249	0.001
13	2.385914	0.4275	2.406272	0.4298	0.001
14	2.334459	0.43834	2.364235	0.4534	0.001
15	2.272584	0.45246	2.485798	0.4323	0.001
16	2.228786	0.4612	2.243814	0.4733	0.001
17	2.184746	0.47274	2.037513	0.5124	0.001
18	2.122987	0.48662	2.140018	0.4915	0.001
19	2.088272	0.49506	2.039162	0.5161	0.001
20	2.019332	0.51038	2.001953	0.5258	0.000905
21	1.946641	0.52746	2.140235	0.5119	0.000819
22	1.890764	0.53862	2.049017	0.5113	0.000741
23	1.828527	0.54936	1.97628	0.5293	0.00067
24	1.776109	0.56386	1.859228	0.5543	0.000607
25	1.715527	0.5719	1.879489	0.5466	0.000549
26	1.662655	0.58238	1.940637	0.5392	0.000497
27	1.622125	0.59304	1.732212	0.5839	0.000449
28	1.57347	0.60306	1.77764	0.5676	0.000407
29	1.533652	0.6108	1.711884	0.5828	0.000368
30	1.497971	0.61974	1.766592	0.5739	0.000333
31	1.467108	0.62608	1.69802	0.5851	0.000301
32	1.435788	0.6315	1.671916	0.5886	0.000273
33	1.39998	0.63972	1.673499	0.5887	0.000247
34	1.369141	0.64648	1.717143	0.5819	0.000223
35	1.347794	0.65202	1.735926	0.5788	0.000202
36	1.329091	0.6557	1.659853	0.5932	0.000183
37	1.30601	0.6588	1.722203	0.5801	0.000165
38	1.282172	0.66328	1.700197	0.5845	0.00015
39	1.275287	0.6659	1.648189	0.5918	0.000135
40	1.258235	0.67214	1.664696	0.5876	0.000122
41	1.23867	0.67356	1.65106	0.5942	0.000111
42	1.221692	0.67772	1.638503	0.5973	0.0001
43	1.209681	0.6813	1.65127	0.5904	9.07E-05



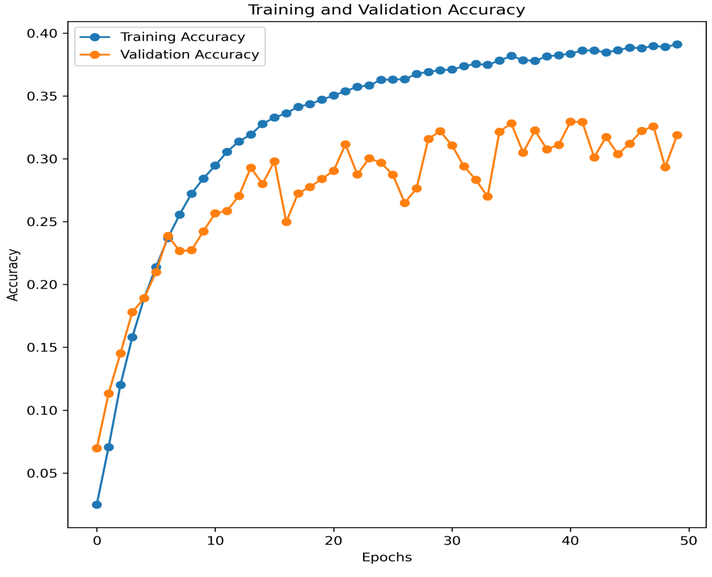


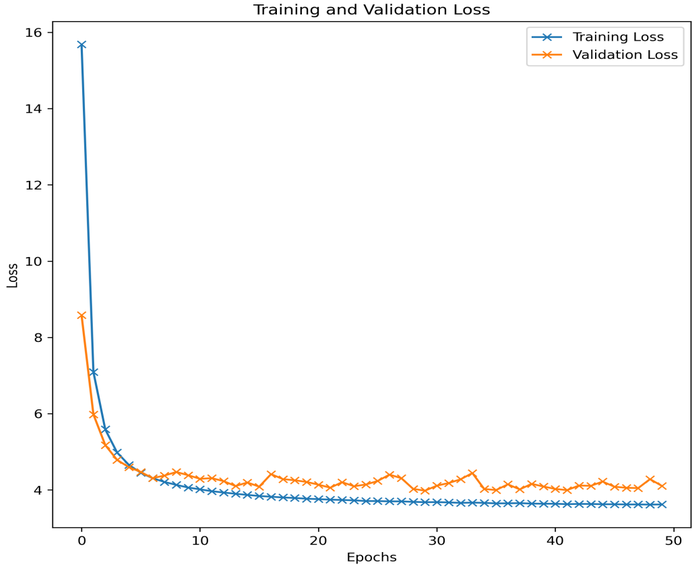
44	1.192429	0.68478	1.632858	0.5952	8.21E-05
45	1.183258	0.6864	1.660219	0.5938	7.43E-05
46	1.176682	0.68898	1.626613	0.6	6.72E-05
47	1.169399	0.68822	1.622521	0.6004	6.08E-05
48	1.167112	0.69118	1.632747	0.5987	5.50E-05
49	1.158187	0.69286	1.583268	0.6052	4.98E-05
50	1.144957	0.69496	1.620557	0.6014	4.50E-05
51	1.134097	0.69798	1.598447	0.6054	4.08E-05
52	1.13571	0.69622	1.609841	0.603	3.69E-05
53	1.12537	0.70022	1.594671	0.6032	3.34E-05
54	1.11847	0.70008	1.600321	0.6036	3.02E-05
55	1.116285	0.70286	1.59361	0.6082	2.73E-05
56	1.117053	0.70004	1.588973	0.606	2.47E-05
57	1.108449	0.70446	1.58884	0.607	2.24E-05
58	1.117572	0.7014	1.603843	0.6044	2.02E-05
59	1.100045	0.70486	1.596701	0.6048	1.83E-05

Test Accuracy: 71.89234

Tiny ImageNet

0	15.67969	0.02488	8.582181	0.0696	1.00E-04
1	7.094246	0.07063	5.982156	0.1133	1.00E-04
2	5.587957	0.12018	5.176978	0.1453	1.00E-04
3	4.980695	0.158	4.787713	0.178	1.00E-04
4	4.655618	0.18917	4.596482	0.1891	1.00E-04
5	4.449856	0.21392	4.471333	0.2099	1.00E-04
6	4.308339	0.23686	4.309326	0.2387	1.00E-04
7	4.20962	0.25571	4.377745	0.2267	1.00E-04
8	4.132969	0.27235	4.471792	0.2273	1.00E-04
9	4.063571	0.28434	4.38649	0.2423	1.00E-04
10	4.015961	0.29465	4.292494	0.2567	1.00E-04
11	3.967413	0.30568	4.309448	0.2586	1.00E-04
12	3.932553	0.31384	4.231244	0.2705	1.00E-04
13	3.90009	0.31933	4.102542	0.2929	1.00E-04
14	3.870343	0.32789	4.19651	0.2801	1.00E-04
15	3.841917	0.33292	4.08559	0.2981	1.00E-04
16	3.823778	0.33627	4.415039	0.2498	1.00E-04
17	3.80307	0.34145	4.285142	0.2726	1.00E-04
18	3.790325	0.34355	4.253942	0.2776	1.00E-04
19	3.771215	0.34705	4.21056	0.284	1.00E-04
20	3.759247	0.35045	4.138474	0.2905	1.00E-04
21	3.746229	0.35387	4.059579	0.3115	1.00E-04
22	3.737605	0.3573	4.203867	0.2875	1.00E-04
23	3.727721	0.35852	4.097901	0.3004	1.00E-04
24	3.709684	0.36281	4.14247	0.2969	1.00E-04
25	3.708782	0.36317	4.234689	0.2874	1.00E-04
26	3.701259	0.36341	4.402052	0.265	1.00E-04
27	3.70011	0.3676	4.308817	0.2764	1.00E-04





28	3.688388	0.36924	4.027901	0.3159	1.00E-04
29	3.679425	0.37056	3.981784	0.322	1.00E-04
30	3.681314	0.37104	4.112414	0.3106	1.00E-04
31	3.674101	0.37369	4.18214	0.2941	1.00E-04
32	3.660981	0.37559	4.279054	0.2834	1.00E-04
33	3.668881	0.3748	4.443059	0.27	1.00E-04
34	3.661688	0.37815	4.02492	0.3217	1.00E-04
35	3.647717	0.38194	3.998126	0.3282	1.00E-04
36	3.650352	0.37853	4.147363	0.305	1.00E-04
37	3.654904	0.37798	4.014928	0.3226	1.00E-04
38	3.642305	0.38151	4.160054	0.3077	1.00E-04
39	3.639209	0.38254	4.090407	0.3111	1.00E-04
40	3.638212	0.38366	4.026485	0.3295	1.00E-04
41	3.628014	0.38629	3.99613	0.3293	1.00E-04
42	3.633857	0.38628	4.116282	0.3012	1.00E-04
43	3.632764	0.38473	4.108703	0.3174	1.00E-04
44	3.625842	0.38652	4.219356	0.3038	1.00E-04
45	3.625723	0.3885	4.08383	0.3121	1.00E-04
46	3.620554	0.38811	4.057572	0.3223	1.00E-04
47	3.62015	0.38979	4.048996	0.3259	1.00E-04
48	3.617455	0.38908	4.283883	0.2934	1.00E-04
49	3.620161	0.39103	4.106543	0.3189	1.00E-04

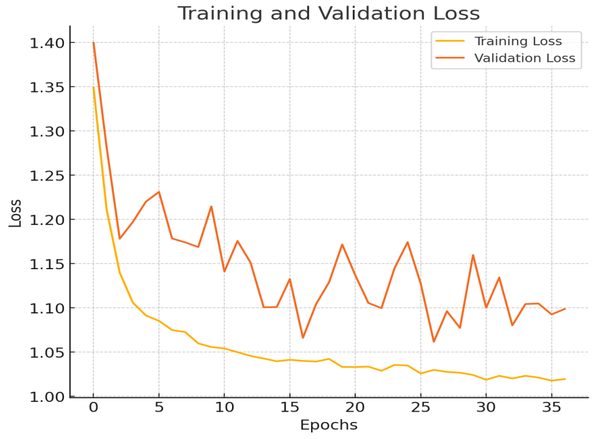
Test Accuracy: 40.02387

	loss	accuracy	val_loss	val_accurac	lr
0	6.22648	0.036844	26.01619	0.004207	0.001
1	5.904052	0.067013	6.753726	0.03726	0.001
2	5.678676	0.086535	5.671416	0.087139	0.001
3	5.570832	0.095601	13.60666	0.00621	0.001
4	5.489325	0.101215	11.20057	0.01222	0.001
5	5.440011	0.104967	8.433698	0.007612	0.001
6	5.463367	0.10879	11.43995	0.009014	0.001
7	5.420113	0.110191	6.704576	0.030048	0.001
8	5.408959	0.112072	23.21483	0.004808	0.001
9	5.383234	0.112812	14.57934	0.011418	0.001
10	5.397692	0.114944	16.10378	0.007011	0.001
11	5.373388	0.117815	14.86815	0.007212	0.001
12	5.398512	0.117455	15.23971	0.008614	0.001

Test Accuracy: 10.03489

	loss	accuracy	val_loss	val_accurac	lr
0	1.34879	0.64426	1.399636	0.6122	1.00E-04
1	1.21115	0.65696	1.281557	0.6226	1.00E-04
2	1.139866	0.66394	1.178123	0.6459	1.00E-04
3	1.105977	0.67062	1.197047	0.6377	1.00E-04
4	1.091335	0.66874	1.220051	0.6255	1.00E-04
5	1.085278	0.6673	1.231077	0.626	1.00E-04
6	1.074891	0.67174	1.178392	0.6371	1.00E-04
7	1.072627	0.6716	1.174082	0.6381	1.00E-04
8	1.059783	0.67254	1.168736	0.6378	1.00E-04
9	1.055693	0.67456	1.214724	0.6239	1.00E-04
10	1.054062	0.67514	1.141048	0.6469	1.00E-04
11	1.049832	0.67584	1.175637	0.6366	1.00E-04
12	1.045551	0.67492	1.151062	0.6426	1.00E-04
13	1.042701	0.67762	1.100632	0.6565	1.00E-04
14	1.039519	0.67954	1.100882	0.6549	1.00E-04
15	1.04124	0.68108	1.132576	0.6505	1.00E-04
16	1.040021	0.6778	1.066028	0.6704	1.00E-04
17	1.039226	0.68196	1.10412	0.6574	1.00E-04
18	1.0422	0.67782	1.129023	0.6541	1.00E-04
19	1.033128	0.67944	1.171678	0.6457	1.00E-04
20	1.033054	0.68246	1.136893	0.6538	1.00E-04
21	1.033499	0.68032	1.10551	0.6624	1.00E-04
22	1.028811	0.68372	1.099641	0.6612	1.00E-04
23	1.035396	0.68148	1.144871	0.6517	1.00E-04
24	1.034748	0.68016	1.174234	0.6396	1.00E-04
25	1.025748	0.68436	1.127446	0.6537	1.00E-04
26	1.029815	0.68318	1.061613	0.6708	1.00E-04
27	1.027546	0.68372	1.096217	0.6648	1.00E-04
28	1.0266	0.6853	1.077309	0.6673	1.00E-04
29	1.02408	0.68554	1.159772	0.6453	1.00E-04
30	1.018586	0.68646	1.100054	0.6638	1.00E-04
31	1.023146	0.68764	1.134245	0.654	1.00E-04
32	1.020138	0.68784	1.080146	0.667	1.00E-04
33	1.023113	0.68656	1.104292	0.6633	1.00E-04
34	1.021102	0.6862	1.104844	0.6649	1.00E-04
35	1.01766	0.688	1.092532	0.6656	1.00E-04
36	1.019397	0.689	1.098681	0.668	1.00E-04

Test Accuracy: 67.0799970626831%



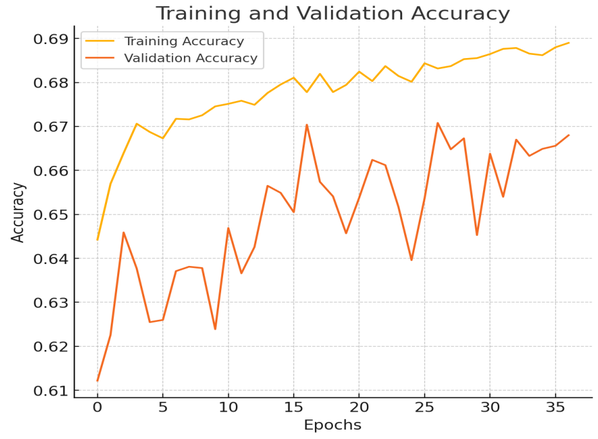


image	predicted_class	predicted_coords	ground_truth_coords	IoU
image1	person	[59, 295, 109, 385]	[57, 295, 105, 384]	0.87516
image2	dog	[180, 245, 269, 336]	[186, 246, 270, 333]	0.882116
image2	vase	[103, 115, 130, 150]	[103, 117, 130, 152]	0.891892
image2	vase	[178, 128, 192, 145]	[178, 128, 191, 147]	0.837121
image2	person	[417, 22, 487, 162]	[419, 22, 487, 169]	0.926431
image2	chair	[279, 87, 364, 164]	[280, 87, 362, 149]	0.776776
image3	horse	[81, 14, 228, 282]	[81, 14, 233, 284]	0.959942
image3	person	[15, 64, 104, 310]	[17, 62, 98, 309]	0.899755

Image1

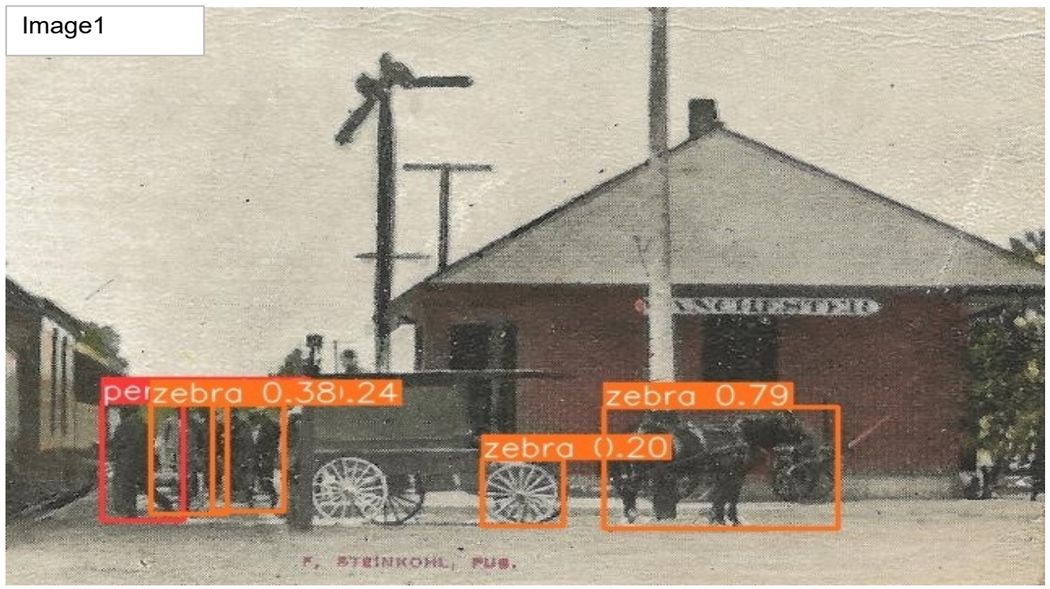
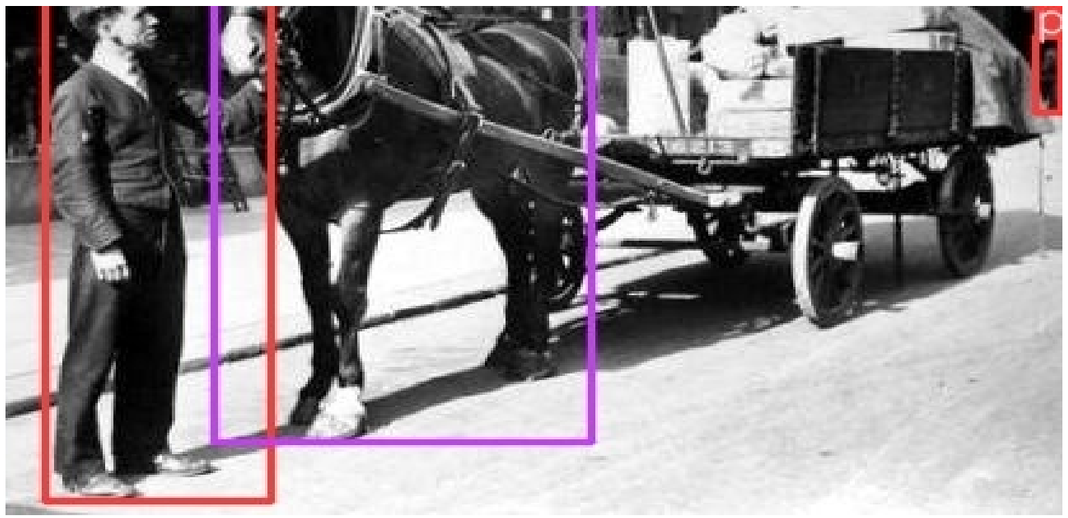


Image2

Image3



Models with Graph and Device

Model: "model"

Layer (type)	Output Shape	Param #
input_layer (InputLayer)	(None, 1)	0
embedding (Embedding)	(None, 1, 2)	2,000
flatten (Flatten)	(None, 2)	0
dense (Dense)	(None, 1000)	3,000
dense_1 (Dense)	(None, 1000)	1,001,000
dense_2 (Dense)	(None, 1000)	1,001,000
dense_3 (Dense)	(None, 1000)	1,001,000
dense_4 (Dense)	(None, 1000)	1,001,000

Base Image: Iguazu Falls

Style Reference Image: Starry Night

Base Image: Iris

Style Reference Image: Wave