

Figure 1 is a line graph showing the training and validation loss for different numbers of units (100, 150, 200, and 250) over 15 epochs. The x-axis represents Epochs (0 to 15), and the y-axis represents Loss (0.0 to 0.6). The legend indicates that solid lines represent training loss and dashed lines represent validation loss for each unit count.

The graph illustrates that as the number of units increases, the training loss decreases, but the validation loss increases significantly after epoch 6, suggesting overfitting. The 250-unit model shows the highest validation loss, peaking around 0.58 at epoch 15, while the 100-unit model shows the lowest validation loss, peaking around 0.56 at epoch 15.

Epochs	100 units training loss	100 units validation loss	150 units training loss	150 units validation loss	200 units training loss	200 units validation loss	250 units training loss	250 units validation loss
1	0.46	0.31	0.46	0.30	0.46	0.30	0.46	0.30
2	0.28	0.28	0.27	0.28	0.28	0.28	0.28	0.28
3	0.21	0.27	0.20	0.27	0.21	0.27	0.21	0.27
4	0.15	0.30	0.14	0.29	0.15	0.34	0.15	0.31
5	0.11	0.29	0.09	0.30	0.11	0.32	0.11	0.36
6	0.08	0.37	0.05	0.35	0.08	0.37	0.05	0.48
7	0.05	0.35	0.03	0.38	0.05	0.45	0.03	0.42
8	0.02	0.43	0.01	0.41	0.02	0.43	0.01	0.45
9	0.01	0.44	0.00	0.45	0.01	0.47	0.00	0.49
10	0.00	0.48	0.00	0.46	0.00	0.49	0.00	0.51
11	0.00	0.48	0.00	0.50	0.00	0.50	0.00	0.54
12	0.00	0.50	0.00	0.52	0.00	0.52	0.00	0.55
13	0.00	0.51	0.00	0.54	0.00	0.54	0.00	0.57
14	0.00	0.53	0.00	0.55	0.00	0.55	0.00	0.57
15	0.00	0.56	0.00	0.57	0.00	0.57	0.00	0.58

The graph displays the relationship between the number of units in a neural network and its performance over time. The x-axis represents the number of epochs (1 to 15), and the y-axis represents the accuracy (Acc) from 0.80 to 1.00. Four sets of lines represent different unit counts: 100 (green), 150 (red), 200 (blue), and 250 (yellow). For each unit count, a solid line indicates training accuracy and a dashed line indicates validation accuracy. Training accuracy for all models increases rapidly in the first 6 epochs and then plateaus at 1.0. Validation accuracy for all models plateaus around 0.88 after epoch 6, with the 250-unit model showing the highest validation accuracy and the 100-unit model showing the lowest.

Epochs	100 units training acc	100 units validation acc	150 units training acc	150 units validation acc	200 units training acc	200 units validation acc	250 units training acc	250 units validation acc
1	0.77	0.87	0.77	0.86	0.77	0.87	0.77	0.87
2	0.89	0.88	0.89	0.88	0.89	0.88	0.89	0.88
3	0.92	0.89	0.92	0.89	0.92	0.88	0.92	0.88
4	0.94	0.88	0.94	0.89	0.94	0.87	0.94	0.88
5	0.96	0.89	0.96	0.89	0.96	0.88	0.96	0.88
6	0.97	0.87	0.97	0.88	0.97	0.88	0.97	0.88
7	0.98	0.88	0.98	0.88	0.98	0.87	0.98	0.88
8	0.99	0.88	0.99	0.88	0.99	0.88	0.99	0.88
9	0.99	0.88	0.99	0.88	0.99	0.88	0.99	0.88
10	1.00	0.88	1.00	0.88	1.00	0.88	1.00	0.88
11	1.00	0.88	1.00	0.88	1.00	0.88	1.00	0.88
12	1.00	0.88	1.00	0.88	1.00	0.88	1.00	0.88
13	1.00	0.88	1.00	0.88	1.00	0.88	1.00	0.88
14	1.00	0.88	1.00	0.88	1.00	0.88	1.00	0.88
15	1.00	0.88	1.00	0.88	1.00	0.88	1.00	0.88