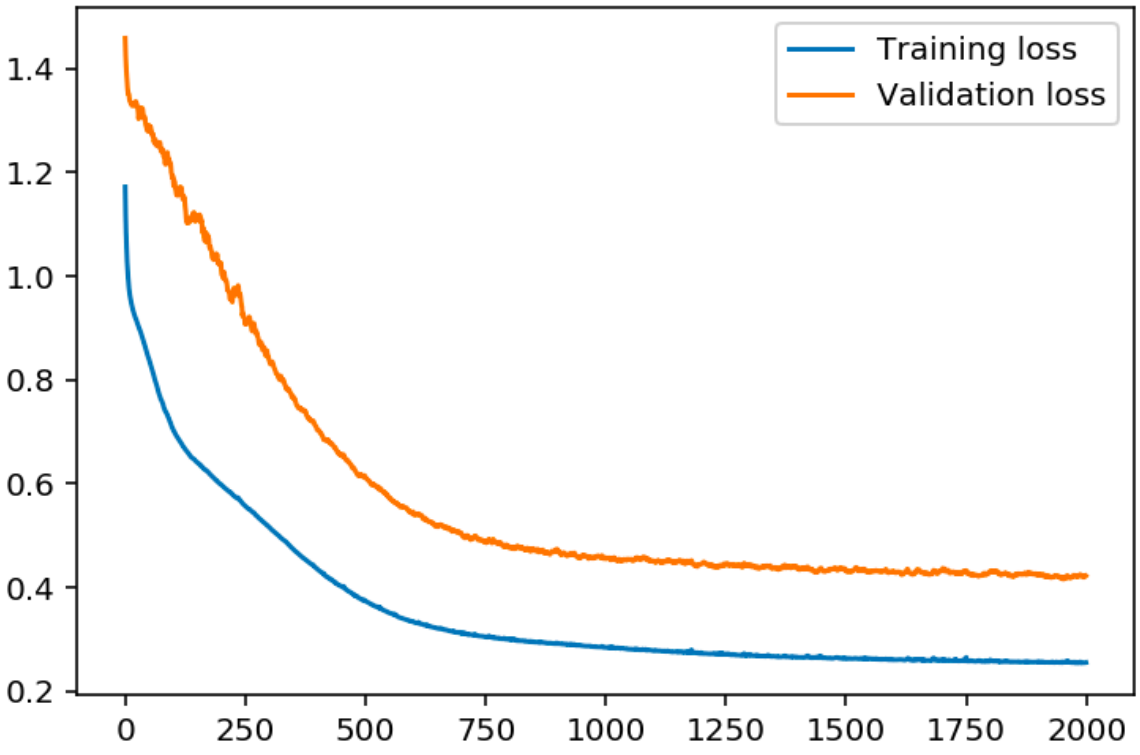
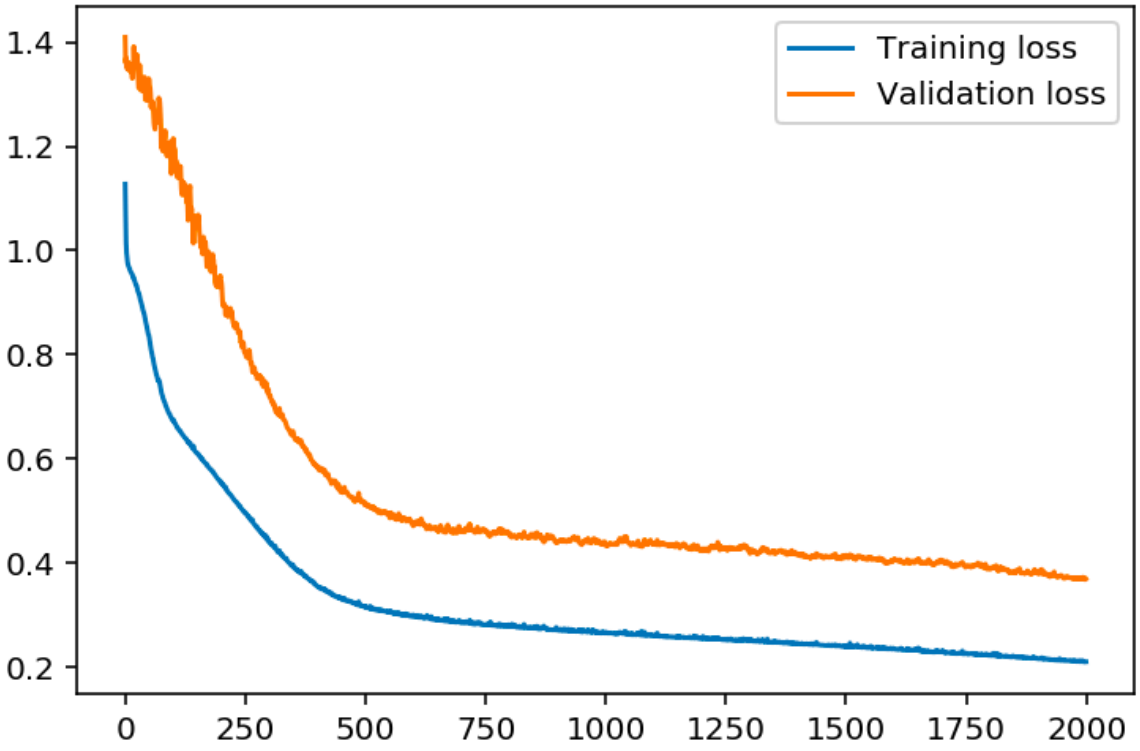
P1 Assignment

iterations = 2000
learning_rate = 0.1
hidden_nodes = 5
output_nodes = 2
Progress: 100.0% ... Training loss: 0.258 ... Validation loss: 0.434

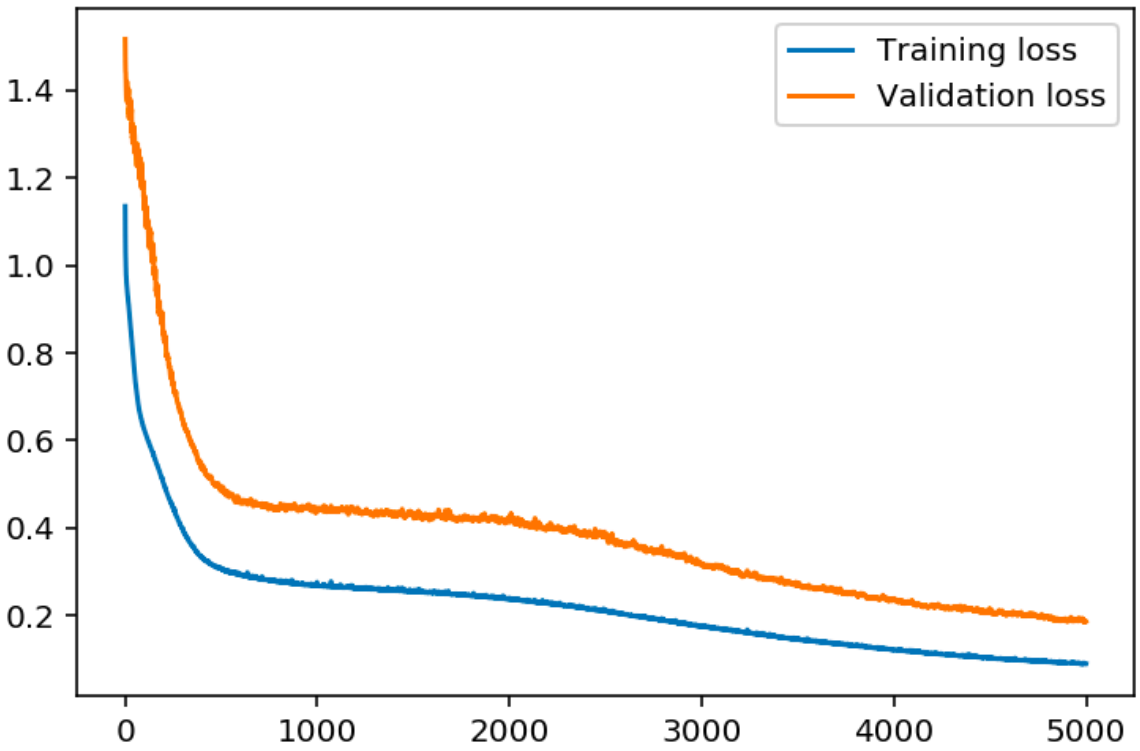
iterations = 2000
learning_rate = 0.1
hidden_nodes = 4
output_nodes = 2
Progress: 100.0% ... Training loss: 0.255 ... Validation loss: 0.422



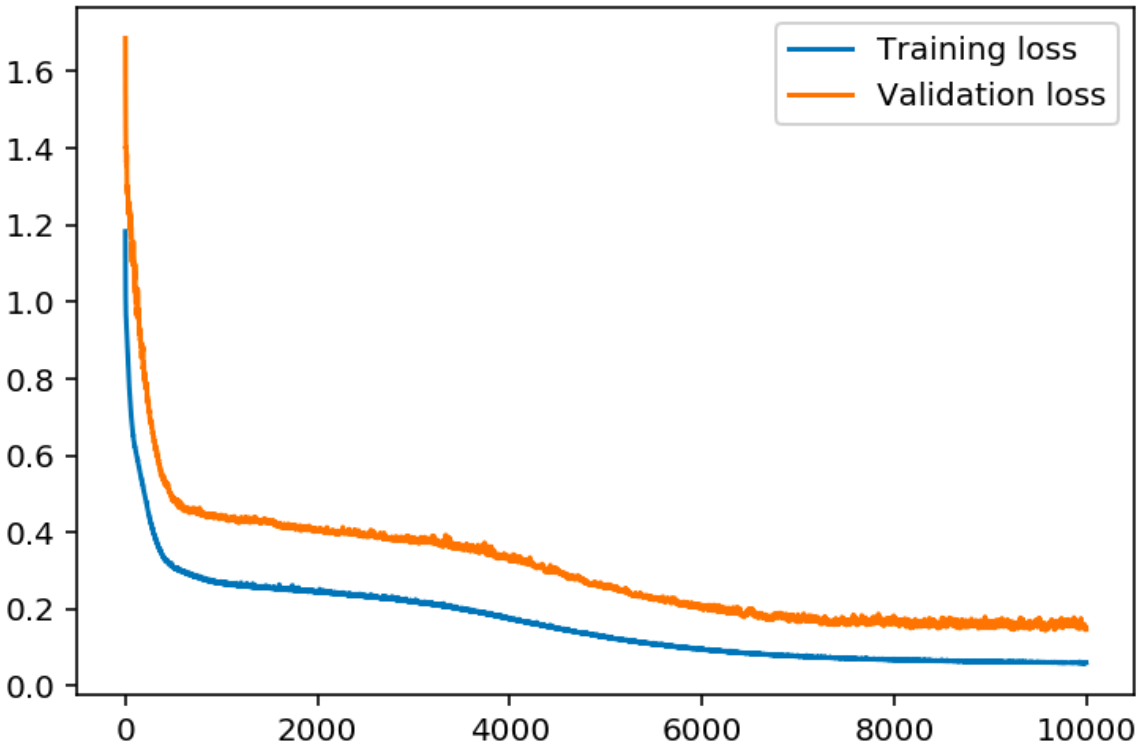
iterations = 2000
learning_rate = 0.1
hidden_nodes = 10
output_nodes = 4
Progress: 100.0% ... Training loss: 0.209 ... Validation loss: 0.368



iterations = 5000
learning_rate = 0.1
hidden_nodes = 10
output_nodes = 4
Progress: 100.0% ... Training loss: 0.090 ... Validation loss: 0.186

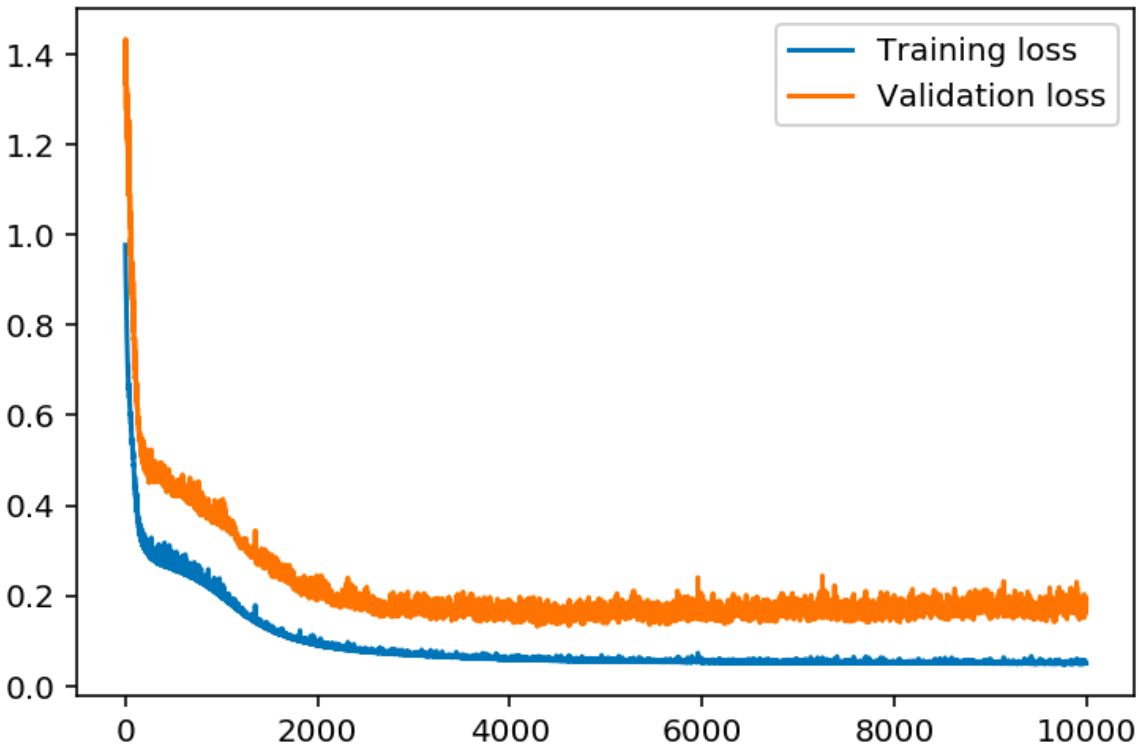


iterations = 10000
learning_rate = 0.1
hidden_nodes = 10
output_nodes = 4
Progress: 100.0% ... Training loss: 0.060 ... Validation loss: 0.147

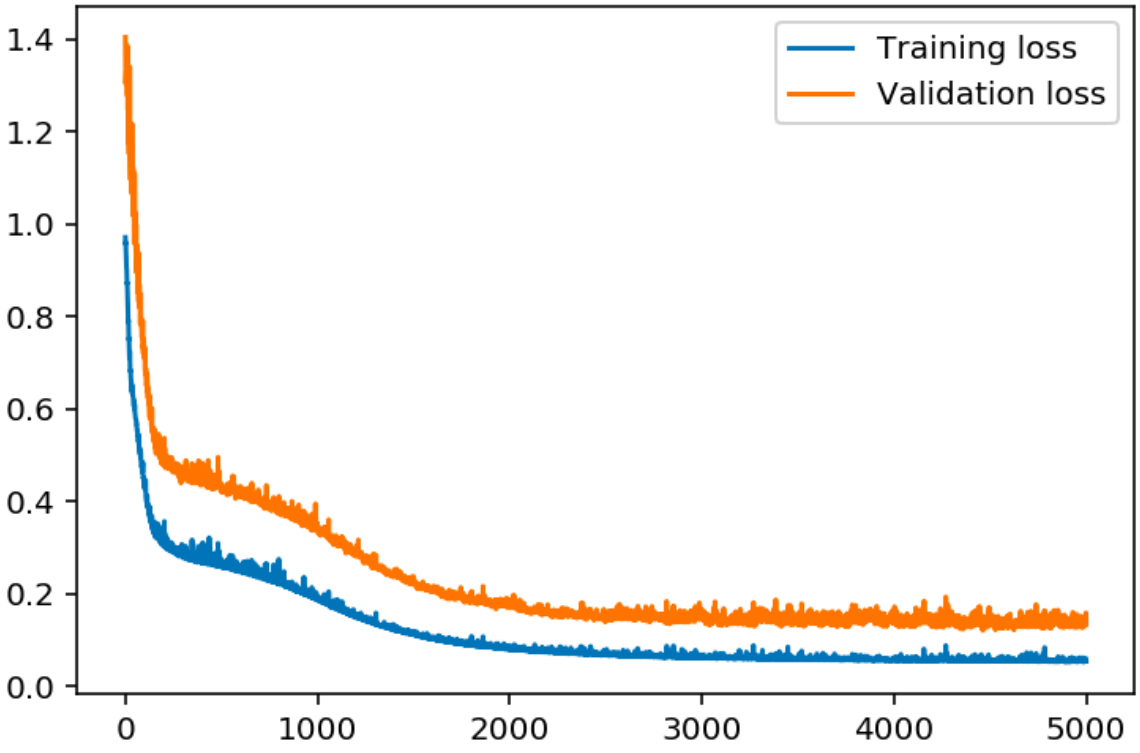


有反弹趋势，不适合继续加大iteration

iterations = 10000
learning_rate = 0.2
hidden_nodes = 20
output_nodes = 8
Progress: 100.0% ... Training loss: 0.050 ... Validation loss: 0.194

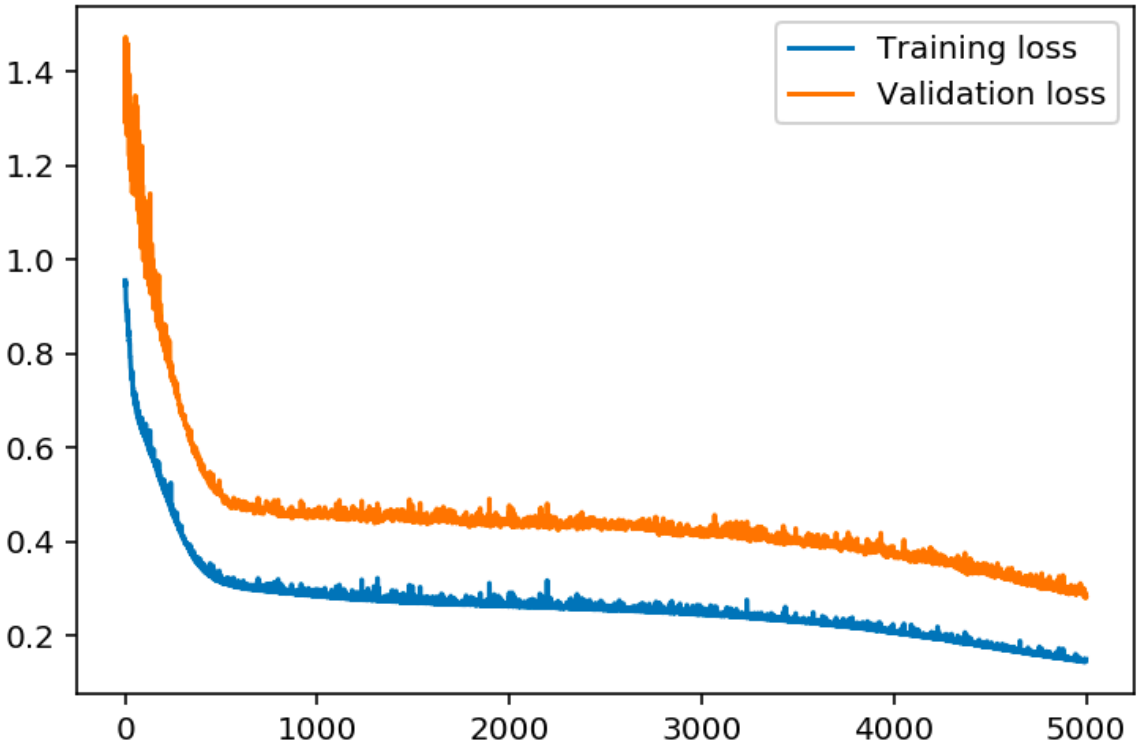


iterations = 5000
learning_rate = 0.2
hidden_nodes = 20
output_nodes = 8
Progress: 100.0% ... Training loss: 0.053 ... Validation loss: 0.133

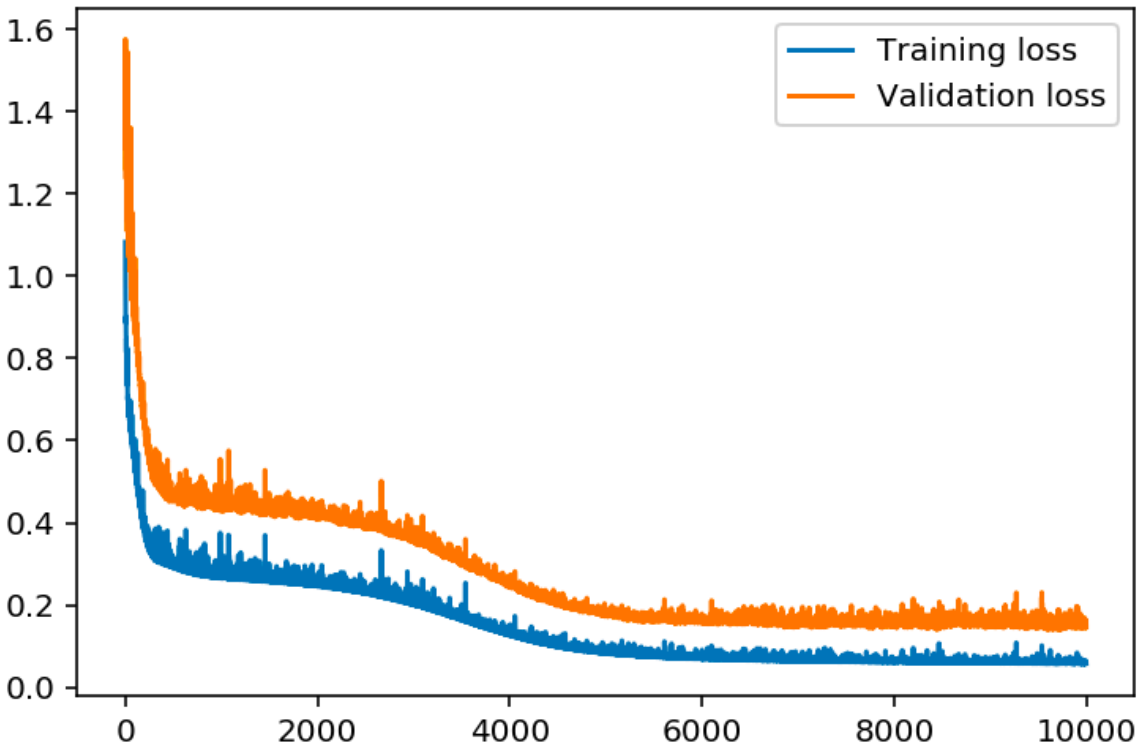


iterations = 5000

learning_rate = 0.2
hidden_nodes = 20
output_nodes = 1
Progress: 100.0% ... Training loss: 0.149 ... Validation loss: 0.280



iterations = 10000
learning_rate = 0.3
hidden_nodes = 20
output_nodes = 1
Validation loss: 0.147


Training loss
Validation loss
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
2000
4000
6000
8000
10000