CSCI964 Computational Intelligence: Lab #1

Mei Wangzhihui 2019124044

Task 1

1) Single-layer Neural Network is an Artificial Neural Network (ANN) with an input layer and a output layer.
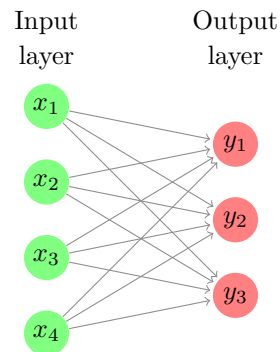

Figure 1: Single-layer Neural Network

2) Multi-layer Neural Network contains more than one layer of artificial neurons with several hidden layer.
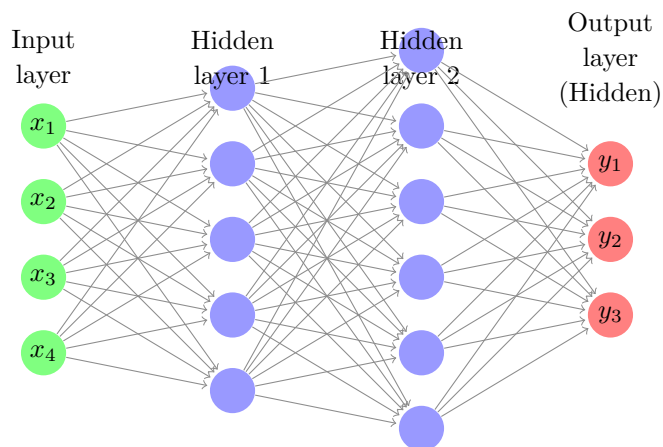

Figure 2: Multi-layer Neural Network

3) Shallow Neural Network contains less hidden layers(usually only one layer). It fit functions with a lot parameters.
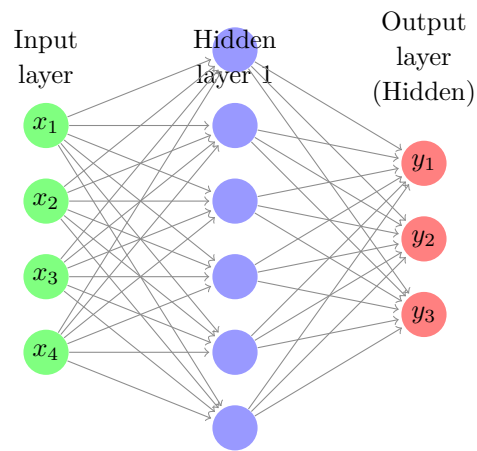
2

Figure 3: Shallow Neural Network

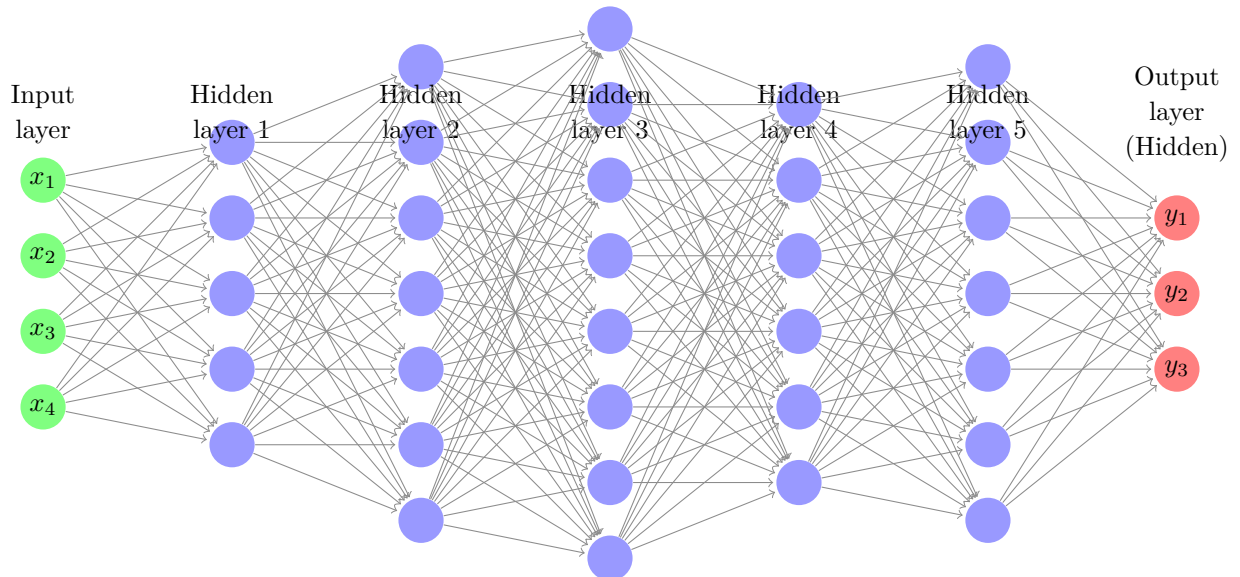4) Deep Neural Network contains many hidden layers. It can fit functions better with less parameters than a shallow network.

Figure 4: Deep Neural Network