



Multilayer Neural Networks

In the previous lessons and the lab, you learned how to build a neural network of one layer. Now, you'll learn how to build multilayer neural networks with TensorFlow. Adding a hidden layer to a network allows it to model more complex functions. Also, using a non-linear activation function on the hidden layer lets it model non-linear functions.

The first thing we'll learn to implement in TensorFlow is ReLU hidden layer. A ReLU is a non-linear function, or rectified linear unit. The ReLU function is 0 for negative inputs and x for all inputs $x > 0$.

As before, the following nodes will build up on the knowledge from the [Deep Neural Networks](#) lesson. If you need to refresh your mind, you can go back and watch them again.

- [ReLU](#)
- [Feedforward](#)
- [Dropout](#)

Search or ask questions in
[Knowledge](#).

Ask peers or mentors for help in
[Student Hub](#).

NEXT