

Luckily, every time we need to use a neural network, we won't need to code the activation function, gradient descent, etc. There are lots of packages for this, which we recommend you to check out, including the following:

- Keras
- TensorFlow
- Caffe
- Theano
- Scikit-learn
- And many others!

In this course, we will learn **Keras**. Keras makes coding deep neural networks simpler. To demonstrate just how easy it is, you're going to build a simple fully-connected network in a few dozen lines of code.

We'll be connecting the concepts that you've learned in the previous lessons to the methods that Keras provides.

The general idea for this example is that you'll first load the data, then define the network, and then finally train the network.

Building a Neural Network in Keras

Here are some core concepts you need to know for working with Keras.

Sequential Model

```
from keras.models import Sequential

#Create the Sequential model
model = Sequential()
```

The keras.models.Sequential class is a wrapper for the neural network model that treats the network as a sequence of layers. It implements the Keras model interface with common methods like <code>compile()</code>, <code>fit()</code>, and <code>evaluate()</code> that are used to train and run the model. We'll cover these functions soon, but first let's start looking at the