

# Extending TensorFlow with Add-ons

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**TFLearn**





# Keras

Library on top of  
TensorFlow or Theano

Focused on Neural Networks

Soon part of TensorFlow

Expanding support to  
other frameworks



# Using Keras



# Keras Installation

**Separate installation may not be needed in future**

**Instructions at [keras.io](http://keras.io)**

**pip installation available**



# Keras Summary

Removes “plumbing”

Reduces errors

Works on multiple frameworks

Not specific to TensorFlow



# TFLearn

Only supports  
TensorFlow

Part of TF  
Distribution

Uses Tensors

Callable from  
TensorFlow

Support for  
TensorBoard



# Using TFLearn

Define  
Layers

Load  
Model

Train

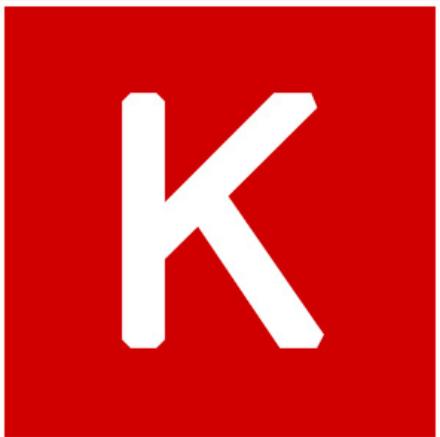
Evaluate





**TFLearn**





**Supports multiple backend frameworks**

**Modular approach**

**Data in numpy or python types**



# TFLearn

**Specific to TensorFlow**

**Adds classes on top of TensorFlow**

**Uses tensors for data**

**TFLearn functions can be called from TensorFlow**



# Keras and TFLearn

Reduce coding

Reduced coding  
=  
Reduced errors

Focused on Neural Networks



