Converting a pandas DataFrame into a TensorFlow Dataset



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Often when working on a deep learning model you will retrieve your source data in a pandas.DataFrame and need to convert it into a format that Tensorflow can read. Fortunately, Tensorflow now has Datasets which create data pipelines for your network to train on. Converting a DataFrame into a tf.data.Dataset is straight-forward. The code below shows how to take a DataFrame with 3 randomly generated features and 3 target classes and convert it into a TensorFlow Dataset. The code uses eager execution mode, but the code will also work when using an execution graph. After the DataSet is created, you can run batch , shuffle and other functions to pre-process the data before training.

Code

Output

TensorFlow

Python

Pandas