Introduction to Neural Networks, MLflow, and SHAP

Purpose: Introduces the concepts of neural networks and MLflow. We will train a simple convolutional neural network on the MNIST dataset using Keras (Tensorflow backend) using Databricks Runtime for Machine Learning. For more information, check out the Deep Learning Fundamentals Series.

Sources:

- `keras/examples/mnist_cnn.py`
- `shap`

```python
import shap
```

```python
import warnings warnings.filterwarnings("ignore") ...
```

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```python
import keras
from keras.datasets import mnist
from keras.models import Sequential
from keras.layers import Dense, Dropout, Flatten
from keras.layers import Conv2D, MaxPooling2D
from keras import backend as K


# Use TensorFlow Backend
import tensorflow as tf
```