README

MNIST Digit Classification with TensorFlow

This project implements a feedforward neural network for handwritten digit recognition using the MNIST dataset and TensorFlow. The workflow includes data normalization and one-hot encoding, model construction with a single hidden layer (128 units, ReLU), and a softmax output layer for classification. Training is performed over 5 epochs using the Adam optimizer and categorical cross-entropy loss. The script reports training accuracy per epoch, final test accuracy, and total training time. This implementation serves as a reproducible baseline for image classification tasks and can be extended for further research or deployment.

How to Run:

1. Install TensorFlow:
   pip install tensorflow
2. Run the script:
   python <script_name>.py

Requirements:

- Python 3.6+
- TensorFlow 2.x

Output:

- Training accuracy per epoch
- Total training time
- Final test accuracy

This summary is clear, professional, and highlights all key aspects for a master's submission.