Fashion MNIST Classifier Using Neural Networks

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Date: May 2025

Description: A deep learning project using Fashion MNIST dataset to classify images into 10 clothing categories.

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1. Introduction

Objective: This project involves training a neural network to classify images from the Fashion MNIST dataset.

Problem: The goal is to achieve high accuracy in classifying images into 10 different categories of clothing.

Dataset: The dataset contains 60,000 training images and 10,000 test images, each belonging to one of the following categories: T-shirt/top, Trouser, Pullover, Dress, Coat, Sandal, Shirt, Sneaker, Bag, Ankle boot.

2. Data Preprocessing

The data is loaded using TensorFlow's built-in dataset function. Each image is normalized and reshaped to fit the input requirements of the neural network.

3. Model Architecture

The model consists of a flatten layer followed by a dense layer. The model is compiled using 'Adam' optimizer and 'SparseCategoricalCrossentropy' loss function.