

Fashion-MNIST IMAGE CLASSIFICATION PROJECT

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One of the most excellent things concerning deep learning is that it assists you to match the x and y relationship and that's what enables you to do magnificent things like have computers examine an image and do recognition or even examine an image and tells you that's a dress or a combination of pants.

Fashion-MNIST is a dataset of Zalando's article images consisting of a training set of 60,000 examples and a test set of 10,000 examples. Each example is a 28×28 grayscale image, associated with a label from 10 classes. Fashion-MNIST is intended to serve as a direct drop-in replacement of the original MNIST dataset for benchmarking machine learning algorithms.

The original MNIST dataset contains a lot of handwritten digits. People from AI/ML/Data Science community love this dataset and use it as a benchmark to validate their algorithms. In fact, MNIST is often the first dataset they would try on. "If it doesn't work on MNIST, it won't work at all", they said. "Well, if it does work on MNIST, it may still fail on others."

Fashion-MNIST is intended to serve as a direct drop-in replacement for the original MNIST dataset to benchmark machine learning algorithms, as it shares the same image size and the structure of training and testing splits.

Task

In this project, we tend to build a neural network (NN) and train it with the "Fashion MNIST Dataset with Keras.

We'll define a CNN network using the Keras deep learning library.

Finally, we'll train our CNN model on the Fashion MNIST dataset, evaluate it, and review the results.