📖 sergejhorvat / **TensorFlow-Data-and-Deployment-Specialization**

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(https://colab.research.google.com/github/sergejhorvat/TensorFlow-Data-and-Deployment-Specialization/blob/master/Device-based%20Models%20with%20TensorFlow/Week%201/Exercises/TFLite_Week1_Exercise.ipynb)
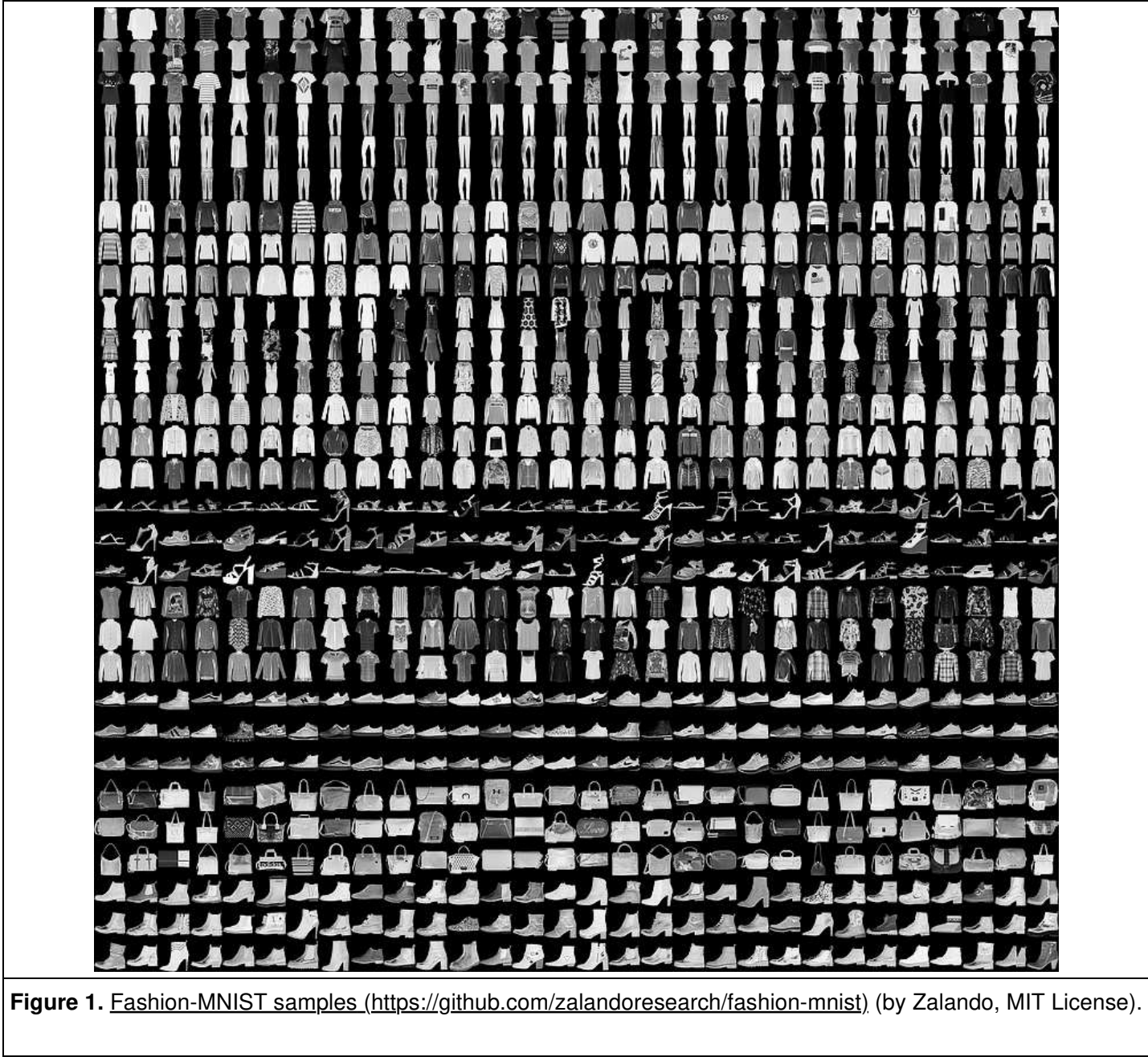
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```
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Train Your Own Model and Convert It to TFLite

Run in Google Colab (https://colab.research.google.com/github/lmoroney/dlaicourse/blob/master/TensorFlow%20Deployment/Course%202%20-%20TensorFlow%20Lite/Week%201/Exercises/TFLite_Week1_Exercise.ipynb)	View source on GitHub (https://github.com/lmoroney/dlaicourse/blob/master/TensorFlow%20Deployment/Course%202%20-%20TensorFlow%20Lite/Week%201/Exercises/TFLite_Week1_Exercise.ipynb)

This notebook uses the Fashion MNIST (https://github.com/zalandoresearch/fashion-mnist) dataset which contains 70,000 grayscale images in 10 categories. The images show individual articles of clothing at low resolution (28 by 28 pixels), as seen here:

Figure 1. Fashion-MNIST samples (https://github.com/zalandoresearch/fashion-mnist) (by Zalando, MIT License).

Fashion MNIST is intended as a drop-in replacement for the classic MNIST (http://yann.lecun.com/exdb/mnist/) dataset—often used as the "Hello, World" of machine learning programs for computer vision. The MNIST dataset contains images of handwritten digits (0, 1, 2, etc.) in a format identical to that of the articles of clothing we'll use here.

This uses Fashion MNIST for variety, and because it's a slightly more challenging problem than regular MNIST. Both datasets are relatively small and are used to verify that an algorithm works as expected. They're good starting points to test and debug code.

We will use 60,000 images to train the network and 10,000 images to evaluate how accurately the network learned to classify images. You can access the Fashion MNIST directly from TensorFlow. Import and load the Fashion MNIST data directly from TensorFlow: