**Fashion Image Tagging**

**Inspiration**

Time is precious and we do not always have the time to look nice. Sometimes, you just throw on whatever you can find in your closet without a second thought. That is where closet apps come in. There are many closets apps available on mobile and digital platform that offer us the promise to organize your wardrobe for easy visibility, plan daily outfits, and track clothing use to declutter your closet by identifying clothes rarely worn.

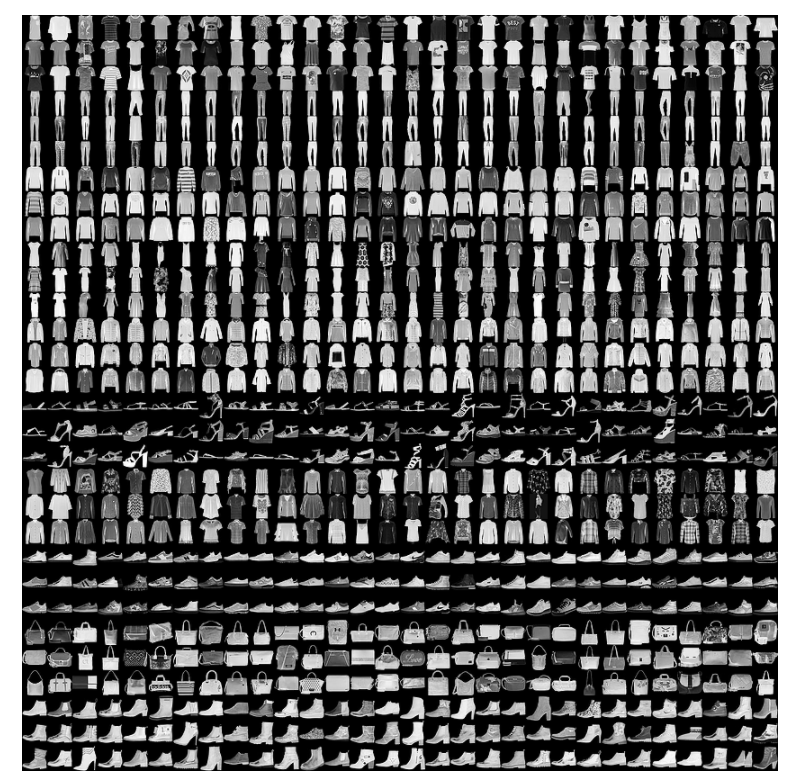
However, when examining the top 5 closet apps in the Apple App store, the ability to mass upload pictures of clothing has yet to be explored. In order to initialize the app, the user has to manually classify each item via tags then separate them into their respective clothing category. But what if we can use Machine Learning to automate this process and prepare the application in minutes rather than hours? Cue in Fashion-MNIST!

**The Data – Fashion-MNIST**

The opportunity to explore machine learning opportunities based on fashion classification has been one of great interest to the scientific community. For this reason, two prominent professors in the data science & analytics space leveraged the idea of the well-loved and vastly used handwritten digit dataset, MNIST, and developed their a new MNIST specifically for Fashion clothing identification.

*“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”*

*Source: Zalando Research URL:* [*https://research.zalando.com/welcome/mission/research-projects/fashion-mnist/*](https://research.zalando.com/welcome/mission/research-projects/fashion-mnist/)



Fashion-MNIST was used to test and train our model but we wanted to use our model for real word application. Therefore, for our predictions, we randomly selected 50 images from various online clothing stores.