Fashion Product Classification

**Team Members:**

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**Motivation**:

We are in an era of AI and Virtual Assistants. Siri, Alexa have become a part our daily life. Virtual Assistants are in most of the fields. The Fashion industry is undergoing dramatic transformations by adopting new Machine Learning, Deep Learning and Computer Vision techniques. The Fashion industry has also began using virtual stylish assistants. Amazon echo look virtual assistant is one example, which will give recommendations based on current trends and user’s choices.

**Significance:**

This kind of model will be used in Virtual stylish assistants, Online retail, etc. Virtual stylish assistant looks at customer Instagram and Facebook images and classify what fashion category they are wearing (bags, dress, etc.). The virtual assistant can help the retailor detect and forecast the fashion trends and launch targeted market campaign. This project will classify the fashion images into corresponding target class (t-shirt, top, bag, shoes, etc.).

**Objective**:

To build a classifier that can look at the images and predict the corresponding target class using Convolutional neural networks in Deep Learning.

**Features**:

* Dataset consist of 28\* 28 grayscale images with values ranging from 0-255.’0’ represents black and ‘255’ represents white color. Dataset has 10 target classes.
* We will divide the dataset into 60000 training dataset, 10000 testing.
* We will train the model after that evaluate the model and Improve the model.

**Frameworks and Libraries:**

* Pandas
* Numpy
* Matplotlib
* Seaborn
* Tensorflow
* Keras

**References:**

<https://www.kaggle.com/zalando-research/fashionmnist>