### Dataset:

- Provided by Kaggle challenge
  - Training, validation and test sets
- Training set 1,0145,444 images of size  $\sim 500 \times 500$
- Total of 288 labels provided
  - Supervised learning

#### Problem:

- Generate labels for input images (clothing)
  - Depending on lighting, color, shape, texture, etc.
  - Images can have different lighting, angles, backgrounds and occlusions

# Approach:

- Pre-processing
  - Gamma correction, normalization, background removal, etc.
- Model
  - CNN's (good for images!)

## **Experimentation:**

- Best features to use SIFT, HOG, etc.
- Bias-variance tradeoff
- Types of CNN's
  - U-net, FCNN, etc.

### Tools:

Python, Tensorflow, pandas, etc





















