

# Dataset: Aesthetics Based on Fashion Images

Aarushi Gaur\* and Krystian Mikolajczyk<sup>†</sup>

University of Surrey, UK

This dataset includes images fully labelled with attributes of body shape (s), top (t) and bottom (b) clothing which can be found in images, with states of the image configurations (s t b) in `config_state_table.txt`. It also includes aesthetic pairwise assessments performed by utilizing these images available in `aesthetic_comparisons`.

## Images

Collectively there are 1064 images for 120 configurations where a configuration represents an image of a person of a body shape with specific top and bottom clothing categories. An image is represented by its configuration (config) and the number of images in that particular configuration. So image `1_10.jpg` belongs to the first configuration and is the 10<sup>th</sup> image of this configuration. Specific states for the configurations as given in `config_state_table.txt` are as follows;

Body shape (s):

1: apple, 2: column, 3: hourglass, 4: pear

Top clothing (t):

1: fitted top, 2: fitted jacket, 3: loose jacket, 4: loose top, 5: ruffled top

Bottom clothing (b):

1: flared trousers, 2: fitted trousers, 3: straight trousers, 4: flared skirt, 5: fitted skirt, 6: straight skirt

For example, image `1_10.jpg` of config 1 (s t b: 1 1 1) in `config_state_table.txt` has an apple body shape with the person wearing a fitted top with flared trousers. The states for the remaining configurations can be determined in a similar manner.

---

\*a.gaur@surrey.ac.uk

<sup>†</sup>k.mikolajczyk@surrey.ac.uk

## Aesthetic comparisons

Ten annotators who follow fashion were recruited and allowed the scoring of a total of 70000 images. The size of the expert and repeated control pairs was set to 700 paired-images, details of which can be found in [1, 2].

The files `aesthetic_01.txt` to `aesthetic_10.txt` contain pairwise comparisons performed by the 10 annotators and `aesthetic_exp.txt` includes annotations performed by the expert. Annotations given by the 10 annotators are consistent with the evaluation performed in [1, 2]. An image pair with the preferred choice is given where 1 indicates a preference for the first image (left) and 2 shows the second image (right) is preferred.

As an example, a total number of 7000 aesthetic comparisons are given in `aesthetic_01.txt` which have been provided by the first annotator. The first comparison in this file includes;

27\_6.jpg 28\_3.jpg 1

Therefore the annotator chooses the left image 27\_6.jpg from the image pair. Out of the 7000 comparisons, 700 have been performed by the expert (`aesthetic_exp.txt`). And 700 are repeated in all the annotations so they have been performed by the remaining 9 annotators as well. These control image pairs have been sampled at regular intervals within an annotated dataset. The expert image pairs are included at positions 5, 15, 25, ..., 6995 and the repeated control pairs are included at 10, 20, 30, ..., 7000. For example, comparison 114\_1.jpg 39\_1.jpg occurs at the 25<sup>th</sup> position in `aesthetic_01.txt` to `aesthetic_10.txt` and at the 3<sup>rd</sup> position in `aesthetic_exp.txt`. And comparison 102\_7.jpg 80\_2.jpg is present at the 20<sup>th</sup> position in `aesthetic_01.txt` to `aesthetic_10.txt`.

## References

- [1] A. Gaur, K. Mikolajczyk, Ranking images based on aesthetic qualities, in: ICPR, August 2014.
- [2] A. Gaur, K. Mikolajczyk, Aesthetics based assessment and ranking of fashion images, CVIU (submitted in October 2014).