Bridging Weak and Strong Modalities via Adversarial Learning (Supplementary)

Submission ID: 479

Training data

Our training data used in experiments are shown below. There are 10,001 sketches from 10,001 person in total. (1)The first row is the sketches drawn by human painters. The photos given to painters for drawing are selected from *MS-Celeb-1M* (Guo et al. 2016). (2)The second row is corresponding photos of drawn sketches. (3)The last row is another photo with the same ID.

Figure 1: An overview of our training data.

Testing data

Similar as training data, the testing data are also drawn by human painters. Totally, there are 1,000 sketches with different identities. (1)The first row is the manual drawn sketches. The photos used for drawing sketches are selected from *LFW* (Huang et al. 2007), which is the *de facto* standard testing set for face verification. (2)The second row is corresponding photos of drawn sketches. (3)The last row is another photo with the same ID.

Retrieval Result

We show some retrieval results from our experiments. Each row contains a sketch image on the top and its corresponding retrieval result ranked by similarity. The correct results are marked by green boxes.
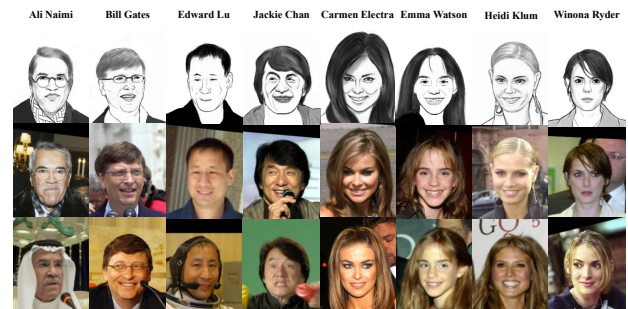
Figure 2: An overview of our testing data.

Figure 3: Some retrieval result of proposed approach.

References

Guo, Y.; Zhang, L.; Hu, Y.; He, X.; and Gao, J. 2016. Ms-celeb-1m: A dataset and benchmark for large-scale face recognition. In *European Conference on Computer Vision*, 87–102. Springer.

Huang, G. B.; Ramesh, M.; Berg, T.; and Learned-Miller, E. 2007. Labeled faces in the wild: A database for studying face recognition in unconstrained environments. Technical report, Technical Report 07-49, University of Massachusetts, Amherst.