Supplementary Material Whats in a Name? First Names as Facial Attributes

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1 Gender and Age Classification from First Names

In this section, we include examples on our gender-from-names and age-from-names classifications in Fig. 2. For the completeness of this document, we briefly describe our gender-from-names and age-from-names classifiers, with the details presented in Section 6 of the main paper. The face images in Fig. 2 of this supplementary material are randomly sampled from the Group Image Dataset [1], a dataset that contains 28,231 face images from Flickr with manually labeled gender and coarse age category (0-2, 3-7, 8-12, 13-19, 20-36, 37-65, 66+) ground truth. As shown in Fig. 1, for each face, we use our constructed name models to rank a pool of 100 first names, such that the names that better fit the facial appearance are ranked higher. We then utilize the gender and birth probability statistics of the first names to make gender and age predictions. We classify a face as male or female based on the gender that dominates within the top-5 predicted names. For age classification, we first compute the birth probability curve over 1921 to 2010, by product weighting the birth probabilities of the ranked 100 names. The confidence of a face belonging to an age category is given by the birth probability averaged over the expected birth year range, and we pick the most confident age category as our age prediction.

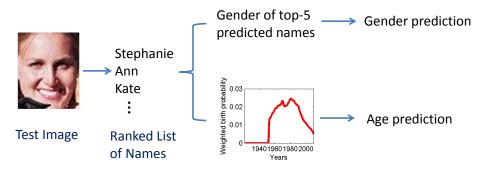


Fig. 1: Overview of our gender-from-names and age-from-names classifiers.

References

1. Gallagher, A., Chen, T.: Understanding images of groups of people. In: Proc. CVPR. (2009)

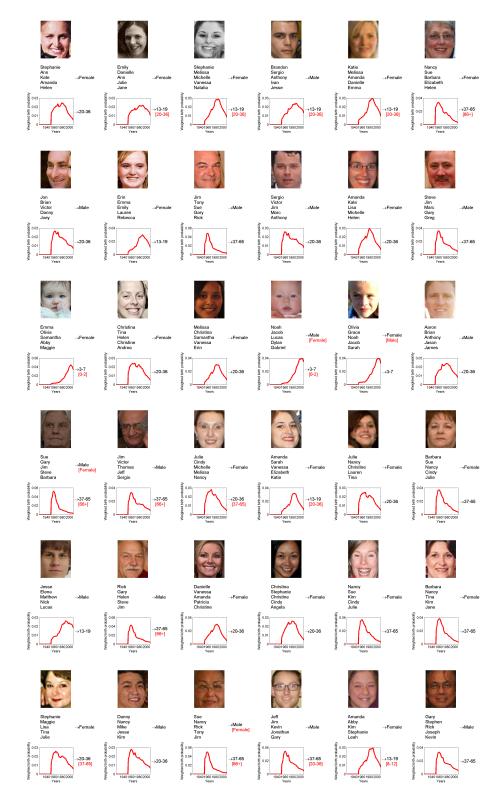


Fig. 2: Examples of inferring gender and age from predicted first names. For a test image, gender is determined based on the dominating gender among the top-5 predicted first names, while age is predicted using the weighted birth probability curve. When our gender or age prediction is wrong, the ground truth is shown in red.

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