Facial Recognition on the Basis of Facial Fragments

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Abstract : There are many articles that attempt to establish the role of different facial fragments in face recognition. Various approaches are used to estimate this role. Frequently, authors calculate the entropy corresponding to the fragment. This approach can only give approximate estimation. In this paper, we propose to use a more direct measure of the importance of different fragments for face recognition. We propose to select a recognition method and a face database and experimentally investigate the recognition rate using different fragments of faces. We present two such experiments in the paper. We selected the PCNC neural classifier as a method for face recognition and parts of the LFW (Labeled Faces in the Wild) face database as training and testing sets. The recognition rate of the best experiment is comparable with the recognition rate obtained using the whole face.