

Over the past three decades, a number of face recognition methods have been proposed in computer vision, and most of them use holistic face images for person identification. In many real-world scenarios especially some unconstrained environments, human faces might be occluded by other objects, and it is difficult to obtain fully holistic face images for recognition. To address this, we propose a new partial face recognition approach to recognize persons of interest from their partial faces. Given a pair of gallery image and probe face patch, we first detect keypoints and extract their local textural features. Then, we propose a robust point set matching method to discriminatively match these two extracted local feature sets, where both the textural information and geometrical information of local features are explicitly used for matching simultaneously. Finally, the similarity of two faces is converted as the distance between these two aligned feature sets. Experimental results on four public face data sets show the effectiveness of the proposed approach.