
Similarity Metric Learning for Face Recognition

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Recently, there is a considerable amount of efforts devoted to the problem of unconstrained face verification, where the task is to predict whether pairs of images are from the same person or not. This problem is challenging and difficult due to the large variations in face images. In this talk, we will present a novel regularization framework to learn similarity metrics for unconstrained face verification. We formulate its objective function by incorporating the robustness to the large intra-personal variations and the discriminative power of novel similarity metrics. In addition, our formulation is a convex optimization problem which guarantees the existence of its global solution. Experiments show that our proposed method achieves state-of-the-art results on the challenging Labeled Faces in the Wild (LFW) database. This is a joint work with Dr. Yiming Ying from University of Exeter and Dr. Peng Li from Aurora Computer Services Limited.