Customized orthogonalization via deflation algorithm with applications in face recognition

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ABSTRACT.

The face recognition problem is a topical issue in computer vision. In this paper we propose a customized version of the orthogonalization via deflation algorithm to tackle this problem. We test the new proposed algorithm on two datasets: the well-known ORL dataset and an own face dataset, CTOVF; also, we compare our results (in terms of rate recognition and average quiery time) with the outcome of a standard algorithm in this class (dimension reduction methods using numerical linear algebra tools).

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