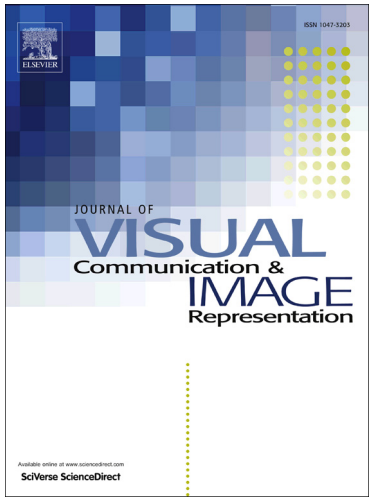

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Abstract

We describes a novel ensemble learning framework for tracking single visual object that, unlike existing ensemble approaches, relies on the modified nonnegative coding to select the optimal subset of classifiers and determinate the corresponding weights. The obtained ensemble classifier makes the tracker to be more robust. The iteration update and the proof of convergence for solving the objective function of the nonnegative coding based ensemble learning are provided. For object tracking, we use the predicted labels generated by each selected individual classifier to compute the correct classification rate, and thence use it to identify occlusion, which is critical to minimize tracking drift. Evaluation is performed on fifty challenging benchmark sequences, and shows our approach achieving or exceeding the state of the art.