

ABSTRACT:

Image block matching is the main step of duplicated region detection for exploring copy-paste image forgery. High computational time in this step is one of the most important problems to find similar regions. In this paper we propose an efficient image block matching algorithm based on two layer feature extraction in order to improve time complexity. Furthermore, we determine performance of proposed algorithm based on time complexity function. The experimental results and mathematical analysis demonstrate that two layer matching can be more time-efficient than previous common methods such as lexicographically sorting.