



AN EFFICIENT ALGORITHM FOR ATTRIBUTE OPENINGS AND CLOSINGS (TueAmOR2)

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✳ Abstract :

In this paper, we present fast algorithms for area opening and closing on grayscale images. Salembier's max-tree based algorithm is one of the well known methods to perform area opening. It makes use of a special representation where each node in the tree stands for a flat region and the tree itself is oriented towards the maxima of the grayscale image. Pruning the tree with respect to some attribute, e.g., the area, boils down to attribute opening. Following the same approach, we propose an algorithm for area opening (closing) without building the max-tree (min-tree). Our algorithm exhibits considerable performance compared to the state-of-the art in this domain.

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