Poisson image blending by 4-EDGAOR iteration via rotated five-point Laplacian operator

ABSTRACT

Poisson image blending is also known as Poisson image editing, is one of the core operation in image processing. The primary aim of this paper is to solve the Poisson image blending problem with the least number of iterations and computational time while obtaining the output images with satisfactory visual effect. In order to achieve this objective, 4-Explicit Decoupled Group Accelerated Over Relaxation (4-EDGAOR) iterative method via rotated Laplacian operator is proposed in this paper. The effectiveness of 4-EDGAOR iterative method in solving Poisson image blending problem is confirmed based on the numerical results obtained from the test examples.