Abstract

A hybrid Super Resolution (SR) algorithm is proposed to deal with the Low Resolution (LR) images degraded by Mixed (Gaussian + Impulse) noise. The algorithm adaptively estimates and removes the impulse noise from the input LR images based on edge, geometrical & size characteristics. The fuzzy based impulse noise removal algorithm is along with adaptive sharpening filter based SR using steering kernel regression are used to obtain a HR image. The experimental results confirm the efficacy of the algorithm for different types of images at various noise densities.

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Super Resolution Reconstruction in Mixed Noise Environment


Index Terms
Computer Science
Applied Sciences

Keywords
Geometric features
Steering kernel regression
SIFT based registration
Interpolation.