EDGE DETECTION IN IMAGES WITH MULTIPLICATIVE NOISE BY USING ANT COLONY SYSTEM

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Abstract

We propose a method for edge detection in images with multiplicative noise based on Ant Colony System. To adapt the Ant Colony System algorithm to multiplicative noise, global pheromone matrix is computed by the Coefficient of Variation. We carried out a performance comparison of the edge detection Ant Colony System algorithm among several techniques, the best results were found in the gradient and the coefficient of variation.