

High Speed Image Rotation Algorithm

Authors : Hee-Choul Kwon, Hyungjin Cho, Heeyong Kwon

Abstract : Image rotation is one of main pre-processing step in image processing or image pattern recognition. It is implemented with rotation matrix multiplication. However it requires lots of floating point arithmetic operations and trigonometric function calculations, so it takes long execution time. We propose a new high speed image rotation algorithm without two major time-consuming operations. We compare the proposed algorithm with the conventional rotation one with various size images. Experimental results show that the proposed algorithm is superior to the conventional rotation ones.

Keywords : high speed rotation operation, image processing, image rotation, pattern recognition, transformation matrix

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