Fuzzy image enhancement based on algebraic function and cycloid arc length

ABSTRACT

Fuzzy image enhancement is an important method in the process of image processing. In this paper, we present two intensifier operators in fuzzy image enhancement process based on algebraic function and cycloid arc length respectively. The first method directly uses the algebraic function as a membership intensifier operator. The second method also using a intensifier operator which established established by the cycloid arc length as the independent variable. In the last section, the test image is experimentally analyzed, and the results show that the method we proposed can improve enhance the contrast of the image.