FUZZY ENHANCEMENT TECHNIQUE USING S-MEMBERSHIP FUNCTION IN MEDICAL APPLICATIONS

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ABSTRACT

This paper presents a new image enhancement method through fuzzy logic based S-shaped membership function for contrast enhancement of X-ray images in medical diagnosis. The main idea is to enhance the tissues and also smooth the distorted regions adaptively from a proposed Fuzzification technique using S-shaped Membership function. Firstly, we apply the median filtering operation for reducing unwanted noise contents and sequentially the transformation operation. Experimental results show that the proposed method can enhance tissues brightness level for better image quality.

KEYWORDS: Image Enhancement, Fuzzy Logic, Membership function, X-Ray Images