## ABSTRACT

This study applied the intuitionistic fuzzy set approach based on optimum value of entropy derived from some equations. The membership and non-membership functions are computed for the grayscale images. Moreover, the modification of membership function is obtained by using intuitionistic fuzzy entropy. The result shows that the entropy-based intuitionistic fuzzy enhancement method gives good-quality images as the Structural Similarity Index Measure (SSIM) values are closed to 1.