Abstract

In this time digital image become important thing and useful in many area of our life and it's make the need of digital image become much more and various. Very often reparation of damage digital image is needed because the limit of acquisition tool these day. Environment and acquisition tool which is not ideal will result damage to digital image in the form of noise.

In this final project Fuzzy Similarity is analysed and implemented to reduce noise in digital image, so that the quality of image can be improved. Noise that's used is Gaussian and Impulsive noise, where it's generated by a noise generator.

Performance parameter that's tested is PSNR(Peak Signal-to-Noise ratio) from image result by filtering process. The performance of Fuzzy Similarity in reduction of Gaussian noise and Impulsive noise will be compared to the performance of Fuzzy Image Filtering method. From the analysis, asserts that Fuzzy Similarity method is proper to be used for decreasing Gaussian noise with standar deviation not more than 40 dan decreasing Impulsive noise with probability not more than 0,3.

Keywords: *citra digital, noise, pengurangan noise, fuzzy similarity, PSNR.*