

ABSTRACT

Nowdays, peoples are moving from analogue image to digital image. Digital images are often contaminated by impulsive noise due to errors generated in noisy sensor and communication channels, so the image's quality become decrease.

In order to reduce the impulsive noise on digital images so in this final task, Long-Range Correlation Method, will be analyzed dan implemented, so we can improve image's quality. The idea of this method is to find the best remote window from some candidate remote window in different region of search range in the image. The selection of the best remote window is based on Mean Squared Error of the Matching part (MSE_M) in the good part of local window and the candidate remote window. Each of candidate remote windows will result in mean-squared error of the matching part MSE_M , the remote window with the least MSE_M will be selected. Then, the corrupted pixels in local window will be recovered using the good pixels in the transformed remote window.

Keywords : *Noise filtering, impulsive noise, long-range correlation.*