

## Abstract

Detection of edge at digital image aim to recognize a pattern found on itself image. Recognized of pattern at a image will be easy go of informations at a image. Rothwell represent one of the method in detecting edge at a digital image which have Gaussian smoothing to reduce noise. At this final duty will to analyse performance of method of Shen-Castan pursuant to (error detection), FOM (Figure of Merit) at level of it's percentage of nosie, variation of assess trhreshold, sigma and alpha.

Of conducted examination, rothwell method is one of right method for recognize object. Rothwell method good enough to reduce noise because Gaussian smoothing build up here, that prove on experiment which change sigma value to reduce noise.

Key word : *Nosie, Rothwell, edge detection, FOM*