ABSTRACT

First-Order linear filter constitute the algorithms most widely applied to edge detection in digital images. Nevertheless like one of them linear sobel operator don't allow good result to be obtained from image where contrast varies a lot or non-uniform lighting, as it happens during acquisition of most part of natural images. It's stimulate the development of Fuzzy used. The development of Fuzzy is to solve the problem of ambiguity and vague, that in this case match with characteristic of natural image that have edge in low contras area or not clearly edge because blur of image. The Used of Fuzzy tecnique in edge detection hoped will allow better result without lossing information that contained in that image.

In this final project evaluated use of Fuzzy Inference System applied to edge detection and evaluated robustness to the image which contain noise blur.

The result of testing show that edge detection to image with contain noise blur with Fuzzy Inference System allow good result that is calculated with MOS (Mean Opinion Score).

Keyword : *Edge Detection, Fuzzy Inference System, Noise Blur, MOS.*