

## Abstract

*Extraction character as a preprocessing from the character pattern recognition process have been usefullable in daily live. For the example, for character recognition that use in bank for check paper, transportation plate number, barcode, and so on. But there is not much system that can handle image with complex background or with variation of colour as inputs image, so that needs a method for handle the image. This final project apllying Multilevel Thresholding dan Region Growing method for extracts that image. Metode Multilevel Thresholding method is used for handle complex background image, while Region Growing method is used for segment a character from the background. For performance analyze used Objective and subjective scoring. Objective scoring used with calculating segmentation accuration score, that compare the similarity rate of segmentation test image result with the compare image. Subjective scoring used Mean Opinion Score (MOS) with ten observers.*

**keywords:** *character extraction, segmentation, Multilevel Thresholding, Region Growing, Mean Opinion Score.*