ABSTRACT

the process of segmentation is a very important part in the analysis of the imagery. Not just on image object image processing but also on images of handwriting. But often the segmentation of handwritten image only on the sentence and Word segmentation segmentation. Segmentation of handwritten images still need to be developed to the segmentation of each characters letters or numbers so that its use on image processing more accurate and better. Problems to develop segmentation handwriting glyphs if the glyphs touched. To separate 2 characters handwriting touched the segmentation as a process that can separate character.

In this final task done a simulation about segmentation image penmanship touched use algorithms zhang suen. These algorithms is one algorithms thinning. Its stages on duty this final consisting of thinning, ekstrasi features points to figure out the points cutting, slaughter. On duty this final will focus on analysis segmentation handwriting a figure touched not only single touching but also multi touching.

From this simulation produced the best accuracy of touching numerical segmentation in the Single Touching 79.599%with the Sigma value = 1, and the Multiple Touching 37.943% on the value of Sigma. Sigma values greatly affects the thickness of the handwriting on the image. Thinning Zhang suen still require improvement in order to get the right features extraction Points. The time required to perform segmentation **2.70316** average seconds per character for single touching and **2.51648** seconds per character for multi touching.

Keywords: *segmentation, handwriting, Thinning, algorithm Zhang Suen, single touching, multi touching*