

ABSTRACT

Graphology is a substance of psychological science which commonly use to interpret the character of person through handwriting. In graphology, there are several parameters used to interpret personal character including margin, slant, font size, spacing, etc. In order to determine the parameters, the grapholog commonly using impression and manual measurement by ruler to determine the result. The given process was ineffective because need plenty of time to resolve and must be detail in the process.

Therefore, on this final assignment, a system was designed to identify individual character tendency based on digital image processing using spacing between words parameter in handwriting. Spacing between words interpreted the social-interaction of writer toward surrounding and others. Data sample used were 30 samplings of handwriting with the object of research was a person in 18-23 year's old with diverse study background. And then the handwriting was captured by scanner. In the process, there are several steps, first is processing, in processing there are two steps to do that is cropping the letter of "m" to get the reference value for the measurement and horizontal segmentation to get a line of handwriting. Second step is spacing calculation, which is to calculate each spacing between words per each line of handwriting. The last step is classification, which is to classificated the type of space between words, the way to classificated is by compare the result of cropping the letter of "m" and the result of space between words per each line, if the result of cropping letter of "m" > space between words per each line so the it's shows that the type of space between words is wide spacing.

The designed of system can classify 2 types of social interaction characters that are tend to keep distance with people around and tend not to keep distance. If the spacing is narrow spacing it means tend not to keep distance and if the spacing is wide it means tend to keep distance with people. The accuracy result of this study was that systematically and manually test reached a similarity. Among 30 samplings of handwrite, there was 28 data of similarity. The accuracy result was obtained more than 93.33%.

Keywords: Graphology, digital image processing, spacing between words, social interaction.