

## ABSTRACT

Identification of human personality performed in various ways, one of which is through analysis of handwriting based on certain criteria. Handwriting analysis or commonly referred as graphology is considered able to reflect personality of an individual, because writing movements are controlled by brain which contains memories about various life experiences and is stored in the subconscious. Nowadays, the process of personality identification through graphology is generally performed manually. To identify character individual through graphology most likely using the manual way with book to see each aspects from someone's hand writing. as well as the baseline pattern of hand writing in graphology, still use the manual way to see every hand writing line to know if the hand writing is tend to be up, down, or straight.

This final project designed a handwritten baseline detection system to analyze individual emotional tendencies on optimistic and pessimistic characters. The test employed using the ArcTan Geometry Formula classification method to determine the slant angle of the handwriting baseline, and using handwriting samples which obtained from 42 subjects, with range of age from 19-27 years old. In identifying the system, it can identify 2 tendencies with different emotions, there is optimistic and pessimistic, then with 3 basic line aspects of handwriting, namely tend up, tend down and straight will be classified according to the geometric arctan formula. Based on the system results accuracy value in this final project is 90.47%. So identification system can be said to be successful in identifying the handwriting for 1 line or 1 page of HVS paper.

**Kata Kunci:** *individual character, graphology, handwriting, baseline handwriting, optimism and pesimism emotional.*