

## ABSTRACT

*Fingerprints are an interesting part of the human body and have been studied for a long time. Every individual has a different fingerprint. Currently fingerprints are used for identity, data collection, access control, security, and others. Individual personality can be identified through fingerprints. Fingerprints contain information about individuals such as personality, brain dominance, and potential. By knowing the type of personality, individuals can hone and develop themselves for the better. Parents can guide and educate their children according to their personality and potential.*

*Based on these problems, this final project will design a system that can read, process, and analyze fingerprints so that the child's personality can be known. The methods used in this final project are Minutiae Extraction and Support Vector Machine (SVM) methods. Minutiae Extraction is used for feature extraction in fingerprint image processing and SVM is used for fingerprint recognition. After the fingerprint is classified, the personality result will be recognized.*

*After testing the fingerprint dataset of College of Engineering, Design, and Computing with a total of 147 images, an accuracy of 80.95% was obtained, testing with 182 images primary data obtained an accuracy of 55.56%, and tests with combined data obtained an accuracy of 57.65%. The average speed of the system in processing data is obtained with a time of 34 seconds. The accuracy of the primary data is lower than that of the College of Engineering, Design, and Computing fingerprint dataset because many of the primary data obtained are of inadequate quality.*

**Keywords:** *Fingerprint, Minutiae Extraction, Personality, Support Vector Machine.*