

## ABSTRACT

Fingerprint is an interesting part in human body, and have been resource object since a long time. every individual have a unique fingerprint. until now, fingerprint used for identification, data collection, access control, security, and many more. In addition, fingerprints are considered to reveal an individual's personality, brain domination, and their potential. However, revealing personality from fingerprints is a challenge. To harness the personality potential of fingerprints more effectively, integrated and scientific approaches are needed. This is because traditional subjective methods, lack of scientific consensus, and modern technology require intensive processing. from knowing theirs personality, they can lead themselves for growing their potential and be better. parents can lead and educate their children according to the their personality and potential.

Based on the problems, this Final Project aims to design a system that can read, process and analyze fingerprints to identify a child's personality. In this study, the Convolutional Neural Network (CNN) method will be used to recognize and classify fingerprints. The recognition of personality results will be carried out after the fingerprints have been successfully classified. To achieve this goal, this system will use a fingerprint sensor and conduct testing through the *website*. The fingerprint sensor will enable accurate fingerprint data collection, while testing via the *website* will provide easy and fast access to process data and reveal information about a child's personality. The integration of the fingerprint sensor and testing via the *website* is expected to produce a reliable and efficient system for recognizing children's personalities based on their fingerprints.

Matching major data from fingerprints using 5 fingers as a sample from users has a accuracy rate of 85%. By the number of users who succeeded in authentication was 8 users. The results of successful readings carried out by the system will be displayed through the *website* that has been provided. Registered users will be able to access the system again.

Keyword : CNN, Fingerprint, Personality, Potential