

ABSTRACT

One of the identity recognition systems that has developed is identity recognition through fingerprints. However, due to different skin conditions, sometimes the fingerprint system cannot properly identify it. Some of the common skin problems that affect fingerprint identification include oily skin, dry skin, and cracked skin.

In this final project has designed a fingerprint identification system for fingerprint patterns that are distorted based on image processing. This fingerprint system is a fingerprint recognition system with a higher level of accuracy and speed. The system will implement the Speeded-Up Robust Feature Extraction and Brute Force Matching methods. The results show that the fingerprint system developed in this study successfully recognizes fingerprints with an accuracy rate of 83.30% and is able to perform fingerprint recognition with an average total response time of 1.232 seconds/condition.

Keyword : *Brute Force Matching, Fingerprint Recognition, Speeded-Up Roust Feature Extraction.*