



PROJECT REPORT
FINGERPRINT RECOGNITION
USING MINUTIAE EXTRACTION

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PROJECT REPORT

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This project report has been approved and ratified by the Dean of Faculty
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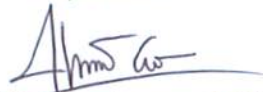
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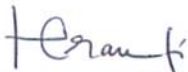
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ABSTRACT

Fingerprint has been used to identify person since a century ago because of its uniqueness. The uniqueness of a fingerprint is exclusively determined by the local ridge characteristics. There are two most prominent characteristic; ridge termination and ridge bifurcation. These two characteristics, which are called minutiae, can be generated as fingerprint template. This study discusses about creating a secure fingerprint template based on Minimum Distance Graph (MDG). This algorithm offers a non-retrievable true minutiae location, and does not need alignment process. The matching algorithm Correspondence Search Algorithm also tested to match query hash against stored hashes. The experiment result shows that this algorithm really depends on core point. The absence of core point affects the matching accuracy.

Keyword: fingerprint recognition, fingerprint matching, graph matching, graph based fingerprint templat.

FOREWORD

“Fingerprint Recognition using Minutiae Detection” is a final project which made for my graduation. This project can be said as a test to what I have learnt after 3,5 years studying in this faculty. Courses that I have learned finally implemented to one project.

My gratitude to God who always gives His blessing to encourage me through difficulties. And thank you to all people who supported me so I can complete this project; my family, lecturers, friends, and teammates. Hopefully, this research can be used as reference for further research with same topic.

Semarang, July 18th 2014

An Nisa Santi Kiswanto

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