



PROJECT REPORT
CLASSIFYING FINGERPRINT IMAGES
ACCORDING TO FINGERPRINT PATTERNS
USING CANNY EDGE DETECTION &
EUCLIDEAN DISTANCE METHOD

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APPROVAL AND RATIFICATION PAGE

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ABSTRACT

Every single person in this earth has a unique fingerprint pattern hence everyone will have different fingerprint pattern. Those differences resulting in very many types of fingerprints. So, this research was conducted to groups those many types of fingerprints based on their patterns.

This project was conducted thorough several process. First, the system went through an image acquisition or image taking process. The image will be taken by using a scanner and also camera with JPG format. Then the image will enter the cropping steps, in which this steps was done with aim to get an image of the fingerprint only. Afterwards, the image will be converted to grayscale image with meaning that those image will only have 1 value in every pixels so it will ease the next process. After that, the image will then be resized to synchronize the size of the image so it will be easier to be processed. Then, after passing every single steps of preprocessing, the image will enter the extraction steps where canny edge detection method was used. Lastly, the image will enter the calculation in which the Euclidean distance will be calculated.

The result from this project were that the fingerprint will be able to be grouped into several groupings based on the patterns and able to obtain the accurate results from 2 ways, which were through scanner and stamp.

Keyword: Fingerprint, Euclidean Distance, Canny Edge Detection, dst

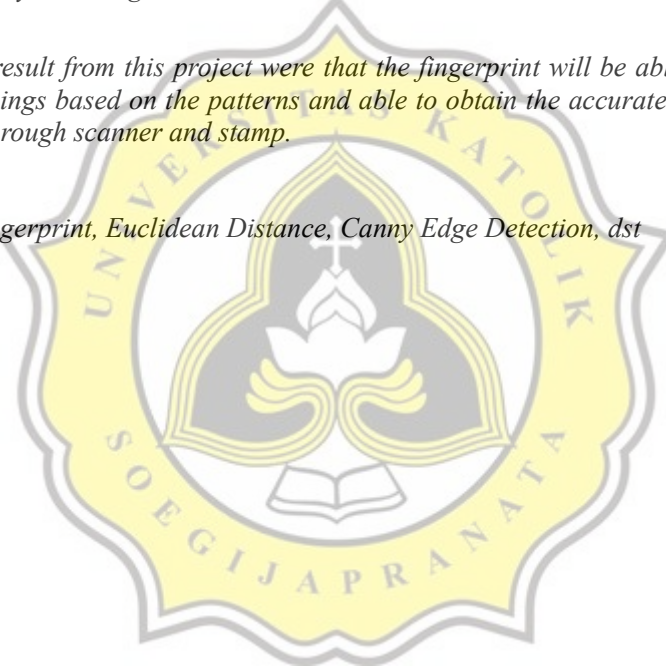


TABLE OF CONTENTS

COVER	i
APPROVAL AND RATIFICATION PAGE.....	ii
STATEMENT OF ORIGINALITY	iii
THE STATEMENT PUBLICATION SCIENTIFIC WORK FOR THE BENEFIT OF ACADEMIC.....	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
ILLUSTRATION INDEX.....	viii
CHAPTER 1 INTRODUCTION	1
1.1 Background.....	1
1.2 Problem Formulation	1
1.3 Scope.....	1
1.4 Objective.....	2
CHAPTER 2 LITERATURE STUDY.....	3
CHAPTER 3 RESEARCH METHODOLOGY.....	7
CHAPTER 4 ANALYSIS AND DESIGN	10
4.1 Analysis	10
4.2 Desain.....	11
CHAPTER 5 IMPLEMENTATION AND TESTING.....	13
5.1 Implementation.....	13
5.2 Testing.....	18
CHAPTER 6 CONCLUSION	21
REFERENCES.....	22
APPENDIX.....	A

ILLUSTRATION INDEX

Illustration 1: Canny Flowchart	8
Illustration 2: Euclidean Flowchart.....	9
Illustration 3: Euclidean Formula.....	11
Illustration 4: GUI view	13
Illustration 5: Graph of the Euclidean Distance Results Based on the Image Noise	19
Illustration 6: Conclusion Graph of Euclidean Result	20
Illustration 7: Graph During the Euclidean Process.....	20

