PROJECT REPORT

SIGNATURE IDENTIFICATION WITH EDGE DETECTION AND CORRELATION COEFFICIENT

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APPROVAL AND RATIFICATION PAGE

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SIGNATURE IDENTIFICATION WITH EDGE DETECTION AND CORRELATION COEFFICIENT

by

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This project has been approved and ratified by the Faculty of Computer Science on December 14, 2016

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STATEMENT OF ORIGINALITY

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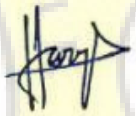

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ABSTRACT

This program is created to detect the level of similarity between two signature images. The program uses correlation coefficient to determine the value of the similarity between two image signature. The signature image will be processed through two stages namely preprocessing and identification.

Preprocessing consists of grayscale, filtering, sharpening, tresholding and edge detection. This results a black and white images with signature pattern in white. The result will be compared with database images which is created by the same preprocessing. The comparation to recognize signature uses statistical correlation coefficient.

The result of signature recognition is 100% for data that is normal image, different sized and given a scratches meanwhile for signature were given rotation is 75% and signature from drawing with canvas is 80%.

***Keywords** : Signature Image, Edge Detection, Correlation Coefficient, Image Processing*

PREFACE

This final project consists of 6 chapters. Chapter 1 describes the background of the problem, objectives and scope of the project. Chapter 2 describes the research that's been done before regard to this project and the methods used. This final project combining edge detection methods and the correlation coefficient for calculating the similarity of signature images.

The Chapter 3 of this final project describe work plan and the steps that will be done. Chapter 4 contains about analysis and design. On the design there is a use case diagram, flowchart, and class diagrams.

Chapter 5 describes implementation and testing. The implementation contains program code that has been created while in the testing contains results from the testing program. On Chapter 6 describe conclusions and further research related to this final project.

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