



PROJECT REPORT  
STEGANOGRAPHY ON EDGE PIXEL OF THE IMAGE

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13.02.0032

2016

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## APPROVAL AND RATIFICATION PAGE

### PROJECT REPORT

Steganography on Edge Pixel of Image

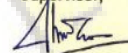
by

Eka Prayogo Thedy – 13.02.0032

This project report has been approved and ratified by the Faculty of  
Computer Science on December 19, 2016

With approval,

Supervisor,

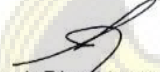


Shinta Estri Wahyuningrum, S.Si, M.Cs

NPP : 058.1.2007.272

Examiners,

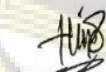
1.)



Suyanto Edward Antonius, Ir., M.Sc

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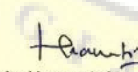
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### STATEMENT OF ORIGINALITY

I, the undersigned :

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Certify that this project was made by myself and not copy or plagiarize from other people, except that in writing expressed to the other article. If it is proven that this project was plagiarizes or copy the other, I am ready to accept a sanction.

Semarang, December 19, 2016



Eka Prayogo Thedy

13.02.0032

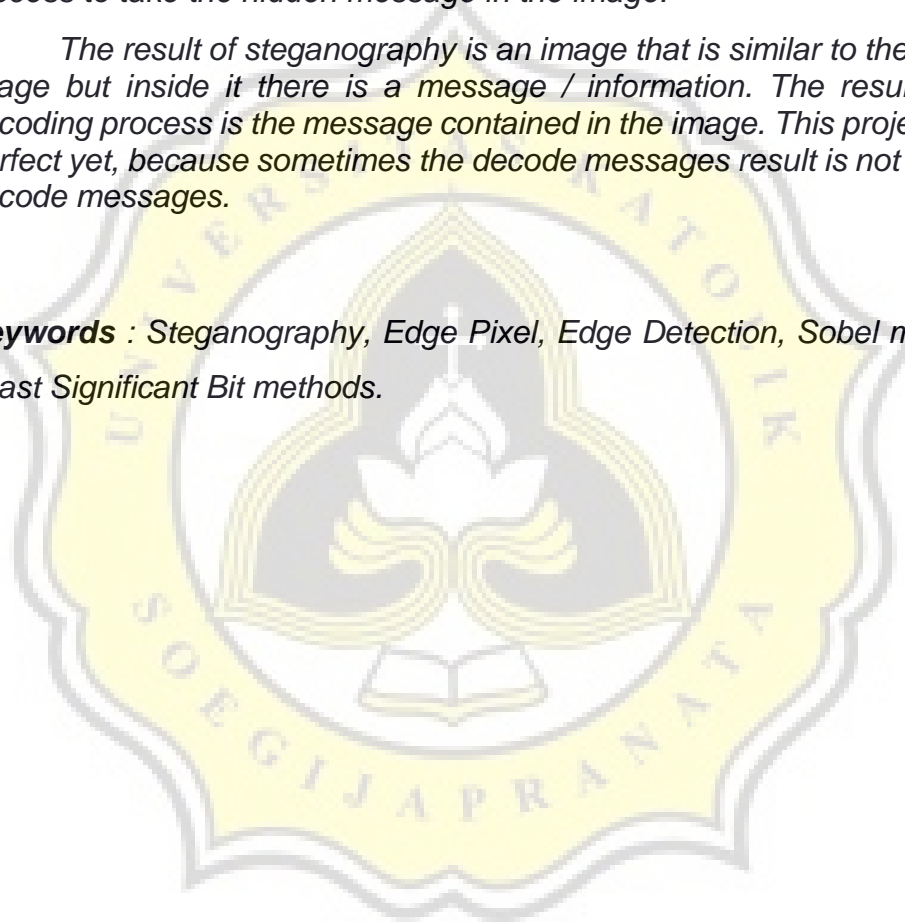
## ABSTRACT

*This Program created for hide messages in the image. The program uses least significant bit method to hide the messages into edge pixel of image.*

*In this program, hiding of messages will be carried out on the edges pixel of image (pixels that have a value of 255) starting from the random coordinates of edge pixels. The images will be processed edge detection first using Sobel method to obtain edges pixel image. There will also decode process to take the hidden message in the image.*

*The result of steganography is an image that is similar to the original image but inside it there is a message / information. The result of the decoding process is the message contained in the image. This project is not perfect yet, because sometimes the decode messages result is not equal to encode messages.*

**Keywords** : *Steganography, Edge Pixel, Edge Detection, Sobel methods, Least Significant Bit methods.*

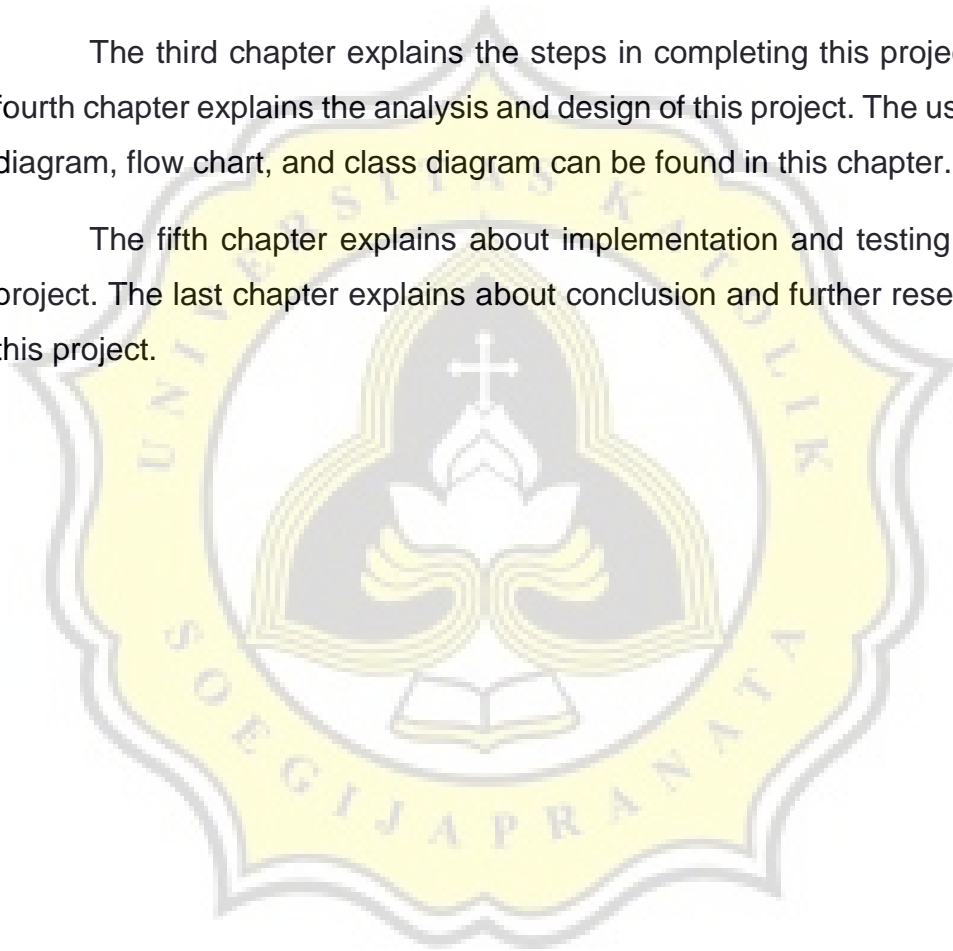


## **PREFACE**

This Final Project contain of six chapters. The first chapter explains the background, scope, and objective of this project. The second chapter explains the algorithm that will be used in this project which are steganography and edge detection.

The third chapter explains the steps in completing this project. The fourth chapter explains the analysis and design of this project. The use case diagram, flow chart, and class diagram can be found in this chapter.

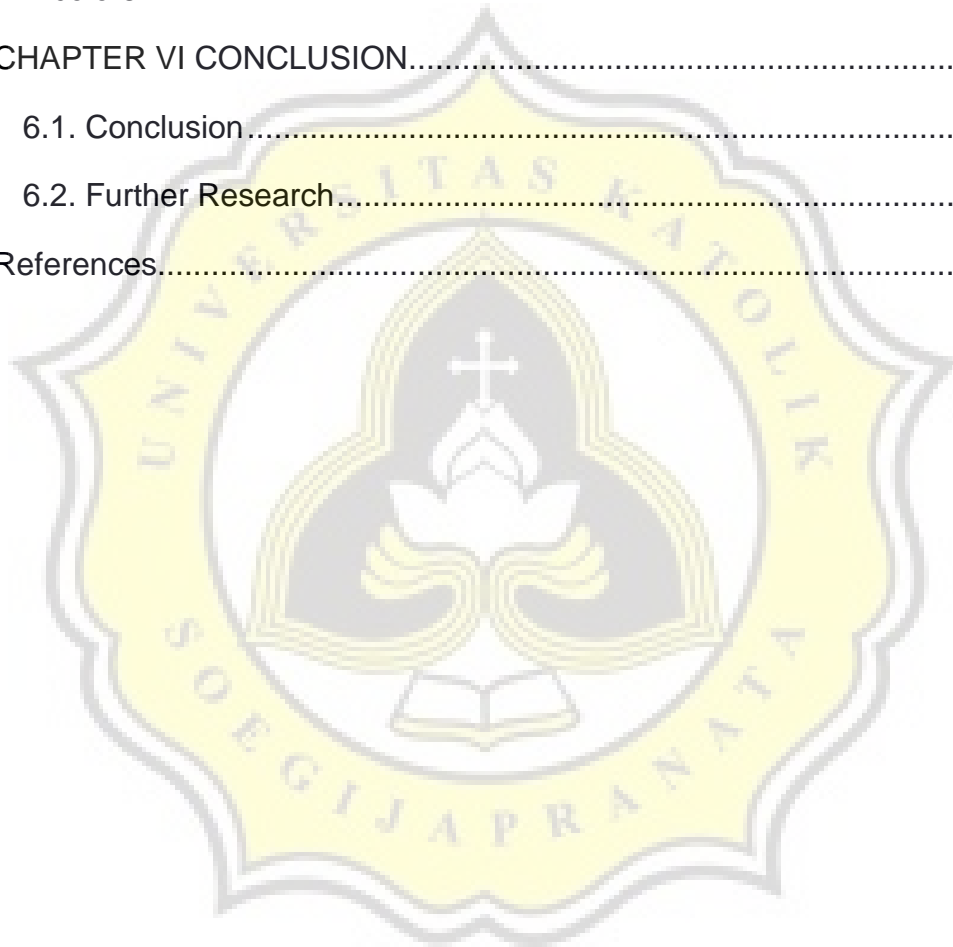
The fifth chapter explains about implementation and testing of this project. The last chapter explains about conclusion and further research of this project.



## Table of Contents

APPROVAL AND RATIFICATION PAGE .....	ii
STATEMENT OF ORIGINALITY.....	iii
ABSTRACT.....	iv
PREFACE .....	v
Table of Contents.....	vi
CHAPTER I INTRODUCTION.....	1
1.1. Background .....	1
1.2. Scope .....	2
1.3. Purpose .....	2
CHAPTER II STUDY LITERATURE .....	2
CHAPTER III RESEARCH AND METHODOLOGY .....	5
CHAPTER IV ANALYSIS AND DESIGN .....	7
4.1. Analysis .....	7
4.2. Design .....	8
4.2.1. Use Case Diagram .....	8
4.2.2. Flow Chart.....	10
4.2.3. Class Diagram.....	12
CHAPTER V IMPLEMENTATION AND TEST .....	15
5.1. Implementation .....	15
5.1.1. Implementation Program .....	15
5.1.2. Program using Image .....	26
5.2. Testing Program .....	33
5.2.1. Testing using image that have background red with 2 colors ..	33

5.2.2. Testing using image that have background gray with 2 colors	34
5.2.3. Testing using image that have background white with several colors.....	36
5.2.4. Testing using image that have background green with 2 color	37
5.2.5. Testing using image that have background dark with many colors.....	38
CHAPTER VI CONCLUSION.....	41
6.1. Conclusion.....	41
6.2. Further Research.....	41
References.....	42



## Table of Figure

<u>Figure 1: Case Diagram Encode</u> .....	8
<u>Figure 2 : Case Diagram Decode</u> .....	9
<u>Figure 3: Flow Chart Encode Process</u> .....	10
<u>Figure 4: Flow Chart Decode Process</u> .....	11
<u>Figure 5: Class Diagram Encryption</u> .....	12
<u>Figure 6: Class Diagram Decryption</u> .....	13
<u>Figure 7: Main Program Display</u> .....	15
<u>Figure 8: Initial Process</u> .....	16
<u>Figure 9: Grayscale code</u> .....	17
<u>Figure 10: Filter Code</u> .....	18
<u>Figure 11: Edge Detection code</u> .....	19
<u>Figure 12: Threshold code</u> .....	20
<u>Figure 13: Change Message into binary code</u> .....	21
<u>Figure 14: Random Pixel Code</u> .....	22
<u>Figure 15: Illustration Hiding the message</u> .....	22
<u>Figure 16: Transform pixels into binary and Hiding Message code</u> .....	23
<u>Figure 17: Count the edge pixel code (Decryption)</u> .....	24
<u>Figure 18: Search coordinate code</u> .....	25
<u>Figure 19: Decryption Code</u> .....	25
<u>Figure 20: Main Display Encryption</u> .....	26
<u>Figure 21: Image input Encryption</u> .....	26
<u>Figure 22: Initial Pixel</u> .....	27
<u>Figure 23: Grayscale Pixel</u> .....	27
<u>Figure 24: Filter Pixel</u> .....	28
<u>Figure 25: Threshold pixel</u> .....	29
<u>Figure 26: Initial Process in Program</u> .....	30
<u>Figure 27: Steganography Process in Program</u> .....	30
<u>Figure 28: Image input Decryption</u> .....	31
<u>Figure 29: Initial Process (Decryption)</u> .....	31





## Table of Table

<u>Table 1 : Testing using gambars.png</u> .....	33
<u>Table 2: Testing using gambarp.png</u> .....	34
<u>Table 3: Testing using Veemon.png</u> .....	36
<u>Table 4: Testing using angka1.png</u> .....	37
<u>Table 5: Testing using acc.png</u> .....	38

