



PROJECT REPORT

Analysis of Spread Spectrum Steganography

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**Faculty of Computer Science
Soegijapranata Catholic University
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APPROVAL AND RATIFICATION PAGE

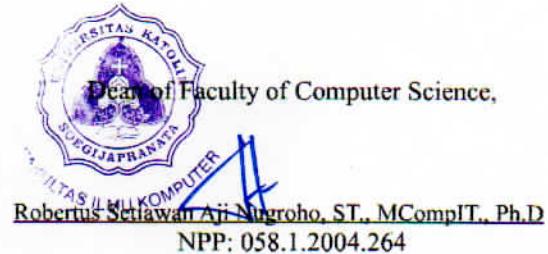
Analysis of Spread Spectrum Steganography

by

Andy Wijaya – 15.K1.0060

This project report has been approved and ratified

by the Faculty of Computer Science on January, 9, 2020



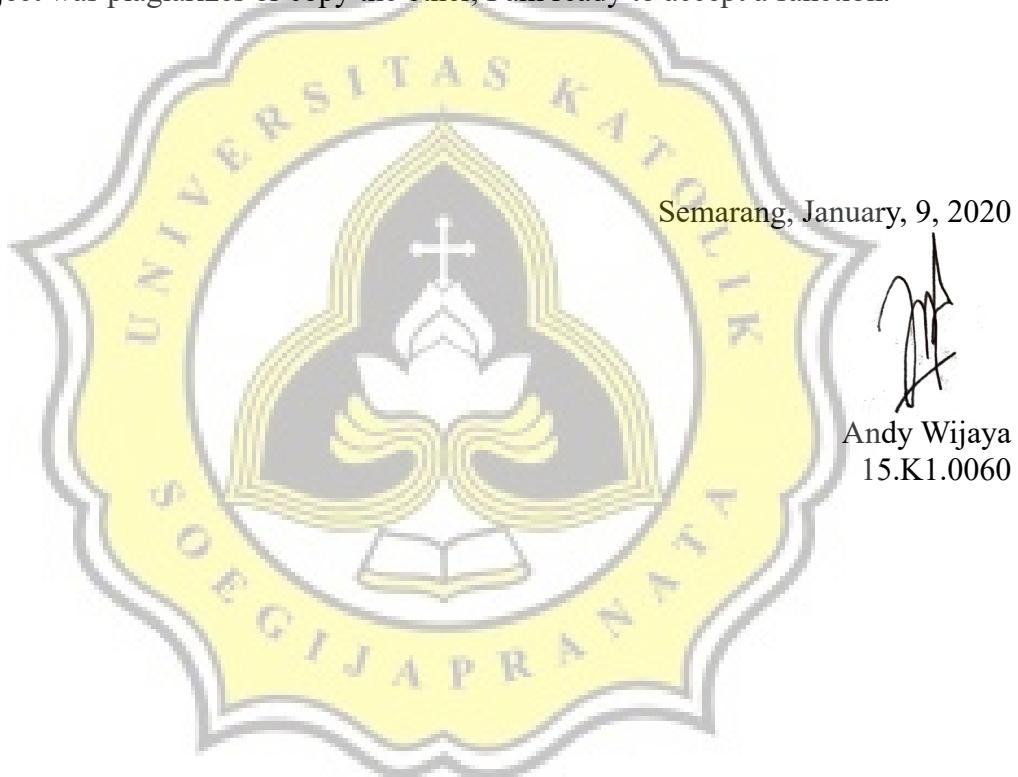
STATEMENT OF ORIGINALITY

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Semarang, January, 9, 2020


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ABSTRACT

Steganography is a technique to secure data in a way so that only sender and receiver that can see it. Steganography need media that used to hide data inside it like sound and image. There will be no difference between media with the result of steganography if it seen by eyes. So, nobody will realize that there is a hidden data on it.

There are many methods in Steganography. Some of them are Least Significant Bit (LSB), Algorithms and Transformation, Redundant Pattern Encoding, and Spread Spectrum. This project will focus on Spread Spectrum method. The reason why this project choose Spread Spectrum because this method rarely used when people talking about Steganography. The application of spread spectrum is spread out all of data to the place that already provided. Because of the spread, the data will be wider than before so its increasing the resistance of detection.

This project is focusing on method analyzing and try to find the weakness of this method. The parameter used in this project to calculate the image quality is Peak Signal to Noise Ratio (PSNR). This parameter will be used to compare the stego image with original image. The PSNR value measured in decibels (dB). Then to find the weakness of Spread Spectrum, this project will examine it with several tests that will focus on examining the message and the key.

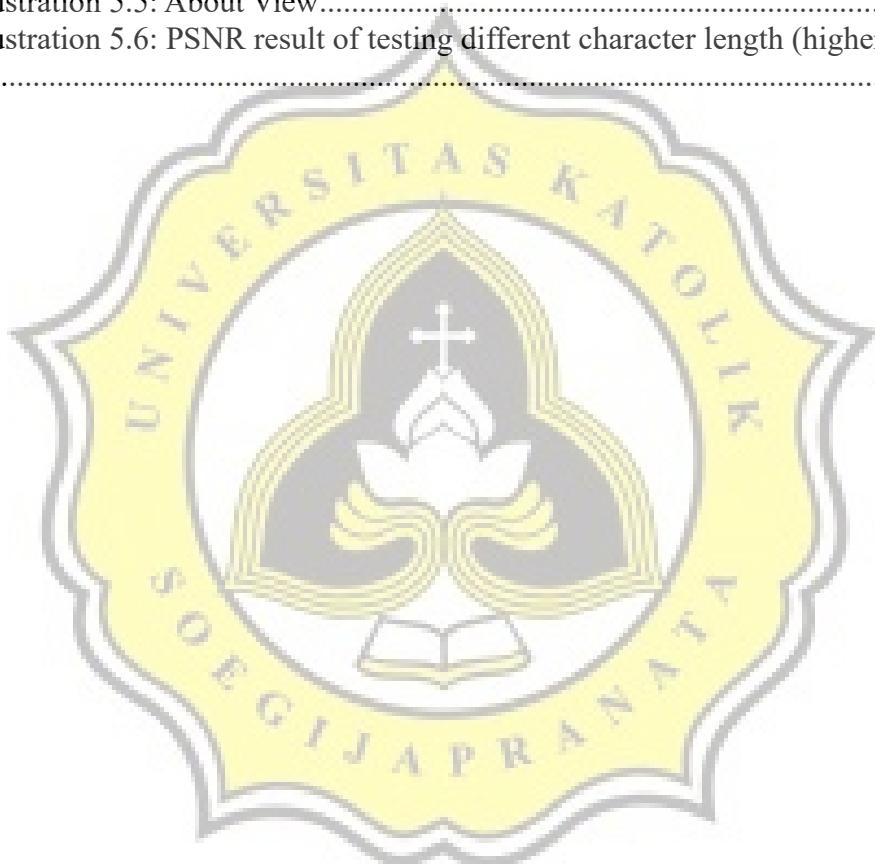
Keyword: spread spectrum, steganography, key

TABLE OF CONTENTS

Cover.....	i
APPROVAL AND RATIFICATION PAGE.....	ii
STATEMENT OF ORIGINALITY.....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS.....	v
ILLUSTRATION INDEX.....	vi
INDEX OF TABLES.....	vii
CHAPTER 1 INTRODUCTION.....	1
1.1 Background.....	1
1.2 Problem Formulation.....	2
1.3 Scope.....	2
1.4 Objective.....	2
CHAPTER 2 LITERATURE STUDY.....	4
CHAPTER 3 RESEARCH METHODOLOGY.....	7
3.1 Study Literature.....	7
3.2 Collecting Sample.....	7
3.3 Applying Method.....	7
3.4 Testing.....	8
3.5 Report.....	8
CHAPTER 4 ANALYSIS AND DESIGN.....	9
4.1 Analysis.....	9
4.2 Design.....	13
CHAPTER 5 IMPLEMENTATION AND TESTING.....	17
5.1 Implementation.....	17
5.2 Testing.....	21
CHAPTER 6 CONCLUSION.....	26
REFERENCES.....	
APPENDIX.....	A

ILLUSTRATION INDEX

Illustration 4.1: Flowchart of Embedding Process.....	13
Illustration 4.2: Flowchart of Extraction Process.....	15
Illustration 5.1: Example Embedding.....	17
Illustration 5.2: Embedding Code.....	18
Illustration 5.3: Example Extraction.....	19
Illustration 5.4: Extraction Code.....	20
Illustration 5.5: About View.....	21
Illustration 5.6: PSNR result of testing different character length (higher is better)	
.....	22



INDEX OF TABLES

Table 4.1.....	9
Table 4.2.....	9
Table 5.1: Test 1.....	23
Table 5.2: Test 2.....	24
Table 5.3: Test 3.....	24

