

Table of Contents

APPROVAL PAGE	i
SELF DECLARATION AGAINST PLAGIARISM	ii
ABSTRACT.....	iii
ABSTRAK.....	iv
DEDICATION	v
ACKNOWLEDGMENTS	vi
CHAPTER I.....	1
1.1. Rationale.....	1
1.2. Theoretical Framework.....	2
1.3. Conceptual Framework/Paradigm	2
1.5. Objectives and Hypothesis.....	3
1.6. Assumption	3
1.7. Scope and delimitation.....	3
1.8. The importance of the study	3
2.1. Random Number Generator.....	4
2.1.1. Blum Blum Shub	4
2.1.2. Mersenne Twister	5
2.2. Selective bitplane.....	5
2.3. Advanced Encryption Standard	6
2.4. Modified Dynamic Cell Spreading Steganography	15
2.5. Method for Mosaicing using RC-4	18
2.5.1. The first is to conduct mosaicing process	18
2.5.2. The second is to conduct the demosaicing process.....	20
CHAPTER III	22
3.1. Research Design	22
3.1.1. Mosaicing process.....	22
3.1.2. Demosaicing process	32
3.2. Specification system implementing proposed method.....	40
3.3. Population/sampling	40
3.4. Experiment Scenario.....	40
3.4.1. Experiment for bitplane selection	40
3.4.2. Experiment for function testing	41
3.4.3. Experiment for observing the performance	41
3.4.4. Experiment for observing the accuracy	42

3.4.5.	Encryption Ratio	44
3.4.6.	The Strength.....	45
3.4.7.	The Robustness	45
3.5.	Sample Data	46
3.6.	Tools for data analysis	47
CHAPTER IV	.....	48
4.1.	Data Presentation	48
4.1.1.	Experimentation for Performance Evaluation based on the Number and Bitplane Order.....	48
4.1.2.	The Performance of Cryptosaic	49
4.1.3.	The Accuracy	50
4.1.4.	Encryption Ratio	52
4.1.5.	The Strength.....	53
4.1.6.	The Robustness	53
4.2.	Data Analysis.....	53
4.2.1.	Performance of computation.....	53
4.2.3.	Comparison between first research [Arya, 12] and Cryptosaic in objective terms: including MSE and PSNR.	57
4.2.4.	Evaluation of Cryptosaic in subjective terms of the invisibility.....	58
4.2.5.	Encryption Ratio	59
4.2.6.	The Strength.....	59
4.3.	Data Result.....	62
4.4.	Summary of finding.....	66
CHAPTER V	.....	67
5.1.	Conclusion	67
5.2.	Future Work.....	67
APPENDIX	.....	70
Appendix A	.....	70
Appendix B	.....	71