

UNIVERSITI TEKNOLOGI MARA

**NODE CLONING DETECTION TECHNIQUE IN
TRUSTED SENSOR NETWORK**

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ABSTRACT

The evolution of technology in sensor node due to the transistor technology advancement enabled the emerging of diverse wireless application in human life. However, these create a much more vulnerable environment in daily life especially by the user. Wireless sensor network built of several to thousands tiny nodes that are communicate to each other. The malicious acts to steal anothehparty confidential data are motivated by their different background and need. Physical attack, such as node cloning gives the adversaries another effort to steal the secret key that is used to decrypt any encrypted data by joining into the network system. There is a lot of research that tried to minimize and revoke the node clone deployed into the network system, however it exhaust the energy and memory of the sensor. For static sensor node, knowing the location of the sensor give the advantage to detect node cloning, it is small and easily implement into the sensor program. Thus increase the life span of the node.

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TABLE OF CONTENT

SUPERVISOR'S DECLARATION.....	i
AUTHOR'S DECLARATION.....	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENT.....	v
LIST OF FIGURE.....	vii
CHAPTER 1: INTRODUCTION.....	1
1.1 BACKGROUND OF STUDY.....	1
1.1.1 Node Architecture.....	1
1.1.2 Network Architecture.....	2
1.1.3 Security Issues in WSN.....	2
1.1.4 Node Cloning Attack.....	2
1.2 PROBLEM STATEMENT.....	3
1.3 OBJECTIVE.....	4
1.4 SCOPE OF STUDY.....	4
1.5 ORGANIZATION OF THESIS.....	4
CHAPTER 2: LITERATURE REVIEW.....	5
2.1 CLONE DETECTION SCHEMES.....	5
2.2 TRUSTED PLATFORM MODULE (TPM).....	6
2.3 TRUST MANAGEMENT SYSTEM (TMS).....	6
2.3.1 Centralize Detection Protocols.....	7
2.3.2 Distributed Detection Protocols.....	7
2.4 ANALYSIS.....	9
CHAPTER 3: METHODOLOGY.....	11
3.1 WORKFLOW.....	11

3.2	NS2 REPRESENTATION.....	11
3.2.1	NS2 Packet Representation.....	12
3.2.2	Addressing Structure in NS2.....	13
3.2.3	Node ID Replication Realization.....	14
CHAPTER 4: LOCATION BASED CLONE DETECTION.....		15
4.1	ASSUMPTION.....	15
4.1.1	Network Assumption.....	15
4.1.2	Adversary Assumption.....	15
4.2	LOCATION BASED CLONE DETECTION NETWORK MODEL.....	16
4.2.3	Clone Detection.....	17
4.2.4	After Clone Detection.....	17
4.3	ANALYSIS.....*	18
4.3.1	Security Analysis.....	18
4.3.2	Communication Overhead.....	18
4.4	SIMULATION AND RESULTS.....	19
4.5	SUMMARY.....	23
CHAPTER 5: CONCLUSION AND RECOMMENDATION.....		24
5.1	CONCLUSION.....	24
5.2	FUTURE DIRECTION OF RESEARCH.....	25
REFERENCE.....		i