

CONTENTS

APPROVAL PAGE	i
SELF DECLARATION AGAINST PLAGIARISM	i
ABSTRACT.....	i
CONTENTS.....	ii
DEDICATIONS.....	iv
ACKNOWLEDGEMENTS	v
LIST OF FIGURES	vi
LIST OF TABLES.....	vii
LIST OF ABBREVIATIONS	ix
LIST OF EQUATIONS	xi
CHAPTER 1: INTRODUCTION	1
1.1 Background	1
1.2 Problem Identification	4
1.3 Objectives	5
1.4 Scope of Work.....	5
1.5 Expected Results	6
1.6 Research Methodology	6
CHAPTER 2: BASIC CONCEPT	7
2.1 Vehicular Ad-Hoc Network (VANET).....	7
2.2 ML-Based Misbehaviour Detection System (MLMDS).....	11
2.3 Cascaded Artificial Neural Network (Cascaded ANN).....	14
2.4 Dataset Preprocessing	14
2.5 5 fold Cross-Validation	18
2.6 Performance Metrics	19
CHAPTER 3: RESEARCH METHODOLOGY	22
3.1 Data Preparation Scenario.....	22
3.2 System Models.....	27
3.3 Simulation Scenario	30
3.4 Analysis Scenario.....	31

CHAPTER 4: PERFORMANCE ANALYSIS.....	33
4.1 Dataset Preprocessing	33
4.2 Simulation Results	36
4.3 Comparative Analysis of Results	48
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS.....	54
5.1 Conclusions.....	54
5.2 Recommendations.....	55
REFERENCES.....	viii