


**DETECTING FRAUD PATTERNS IN TELECOMMUNICATIONS
USING CASE BASED REASONING**

BALA MUSA SHUAIBU

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**DETECTING FRAUD PATTERN IN TELECOMMUNICATIONS USING
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ABSTRACT

All round the world, fraud situations are significantly causing huge revenue leakage in the telecommunication companies every year. The reuse of previous cases is an important issue in dealing with fraud pattern in a data with string features. Case Based Reasoning (CBR) systems have a set of cases inform of library used to facilitate the process of validation of new cases without the direct involvement of a domain expert. The proposed detection technique in this paper is based on Case Based Reasoning used to detect the occurrence of fraud with a meaningful confidence in telecommunication data. Experimental result on the fraud data indicates that the weight for all attribute used in this study needs to be set as 0.1 in order to get 98% similarity performance.

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TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENT	iii
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER 1: INTRODUCTION	
1.1 Background	1
1.2 Problem Statement	6
1.2 Research Questions	8
1.3 Objectives	8
1.4 Scope of the Study	9
1.5 Significance of the Study	9
1.6 Organization of the Report	10
1.7 Conclusion	11
CHAPTER 2: LITERATURE REVIEWS	
2.1 Telecommunication	12
2.2 Fraud	13
2.3 Rule Based	15
2.4 Neural Network	17
2.5 Case Based	22
2.6 Other Techniques	26

2.7 Summary	30
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CHAPTER 3: METHODOLOGY

3.1 Introduction	31
3.2 System Development Research Methodology	32
3.2.1 Construct a Conceptual Frame work	33
3.2.2 Development a System Architecture	34
3.2.3 Analysis and Design	35
3.2.4 Build the System	40
3.2.5 Observe and Evaluate	48
3.3 Summary	49

CHAPTER 4: FINDINGS AND RESULTS

4.1 Functionalities	50
4.2 Interface Design	51
4.3 System Test	55
4.3.1 Percentage Similarity	56
4.4 Conclusion	62

CHAPTER 5: CONCLUSION

5.1 Project's Summary	63
5.2 Problems and Limitations	64
5.3 Recommendation for Future Works	64

REFERENCES	65
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APPENDICES

Appendix A	Use Case	70
Appendix B:	Use Case	72
Appendix C:	User Manual	76
Appendix D:	Test Cases	80

LIST OF TABLES

	Page
Table 1.0 Sample data set	7
Table 3.1 Data attribute	36
Table 3.2 Similarity Computation by Weighted Average	40
Table 4.1 the summary of result for test case 1,2 various attributes weight	59
Table 4.2 the summary of result for test case 3,4 various attributes weight	60
Table 4.1 the summary of result for test case 5,6 various attributes weight	61

LIST OF FIGURES

	Page
Figure 3.1: The Systems Development Research Methodology	33
Figure3.2: Fraud Detection System Architecture	34
Figure 3.3: Sample data set in Microsoft Excel	36
Figure 3.4: Sample data set in Microsoft Access.	37
Figure 3.5: The attributes of Data table	38
Figure 3.6: Rapid Application Development Architecture	43
Figure 3.7: User Design Architecture	44
Figure 3.8: Use case Diagram	44
Figure 3.9: the sequence diagram for login	45
Figure 3.10: Retrieved case sequence diagram	46
Figure 3.11: collaborative diagram	46
Figure 3.12: collaborative diagram	47
Figure 3.13: CBR Engine Welcome Page	48
Figure 4.1: Welcome Page	51
Figure 4.2: Login Page	52
Figure 4.3: Error Message	52
Figure 4.4: System Main Page	53
Figure 4.5: Similarity Retrieval Page	54
Figure 4.4: CBR output when attribute 1 Matches	56
Figure 4.5: CBR output when attribute 1 is not matched	57
Figure 4.6: CBR output when attribute 1 is not match	57
Figure 4.6: CBR output when attribute 1 is not match	58

CHAPTER 1

INTRODUCTION

This chapter gives a general overview of the project. It starts with a background review of the project which explains the motivation behind the project and the domain on which the project is based on. The chapter further describes the problem statement, the objective to be accomplished; significant to be derived from the project, the scope or coverage area and finally highlighted the way subsequent chapters will be organized.

1.1 Background

Telecommunications has brought tremendous achievement in life by providing a means to extend communication over a distance. This is done through telephony, computer networking, television, radio, and so on to transmit information in form of voice or data.. Telecommunications facilitates Internet service provision, networking of computers and telephones and cellular service for cars, fax or modem, or offers voice mail that meet specific business needs. Many telecommunications companies manufacture equipments ranging from simple pagers to mobile office packages for Internet service and high-speed connections. Therefore, telecommunications has brought revolution of new products and technologies to the market.

Examples of such products are:

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