DETECTING FRAUD PATTERNS IN TELECOMMUNICATIONS USING CASE BASED REASONING

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2008

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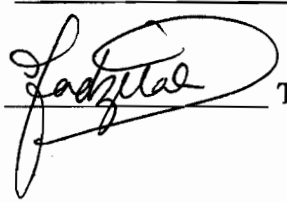
(Signature) :  Tarikh (Date) : 29/04/2008

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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.

ACKNOWLEDGEMENTS

In the Name of Allah, the Most Gracious and the Most Merciful

It is my pleasure to acknowledge the immense contribution of some people who have assisted me one way or the other towards the successful completion of this project.

First of all, I give thanks to the Allah for his guidance and mercy throughout my life. Peace and Blessing to his last Prophet Muhammad (S.A.W.), his household and his companions. My sincere appreciation goes to my beloved parents and family members for their patience, prayers and understanding over the entire period of my study.

Secondly, my grateful thanks go to my supervisors, Prof. Madya Fadzilah Siraj and Nooraini Yusuf who had given their full support and contributed immensely towards the completion of this project. They have actually spent a lot of time patiently and painstakingly giving me the necessary advice, providing valuable information and correcting errors to ensure that the best effort has been given in the completion and achievement of this project.

I also wish to convey my appreciation to Associate Professor. Dr. Norita Md. Norwawi my evaluator who has giving me support and advise for the completion of this project.

Lastly, I recognize the efforts of all my friends, Staff of Faculty of Information Technology, Universiti Utara Malaysia and those who contributed directly or indirectly towards the completion of this project. Thanks to all.

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June 2008

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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:

The contents of the thesis is for internal user only

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