Universiti Teknologi MARA

Fuzzy Approach
for
Student's Performance Analyzer

Mohd Iqbal B. Radzuan

Thesis submitted in fulfillment of the requirements for
**Bachelor of Science (Hons) Intelligent System
Faculty of Information Technology And
Quantitative Science**

April 2007

DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

....

27 APRIL, 2007   MOHD IQBAL B. RADZUAN

                                             (2005668539)

ACKNOWLEDGEMENT

TABLE OF CONTENTS

CONTENTS	PAGE

CHAPTER ONE: INTRODUCTION

CHAPTER TWO: LITERATURE REVIEW

ABSTRACT

As it is a routine activity, the tedious and dreary process of evaluating student's academic records will be a problem for academic advisor to recognize their student's intelligence ability in academic. This major difficulty leads to ineffective evaluation of student's academic records which have to consider many criteria in order to analyze them. Sometimes, it could result to unreliable analyzed result. The objective of this research is to apply the concept of fuzzy logic and fuzzy inferencing in Howard Gardner's theory of multiple intelligence in order to determine student's intelligence level. Concept of fuzzy logic and fuzzy inferencing is proved to be well suited to the problem of this nature as it is capable of capturing the imprecision of human reasoning and judgments. These two concepts have been implemented in the prototype of Student's Performance Analyzer. The prototype is capable to assist academic advisor by analyze the student's academic record and determine their intelligence level in three different areas: spatial, logic and arithmetic, and linguistic. The prototype also is able to provide efficient and reliable analyzing result compared to human's analyzing process. As for the recommendation, the decision support system is one of the enhancement solutions to the research by combining concept of fuzzy logic, fuzzy inferencing and decision support system architecture.