

---

# CONTENTS

<b>APPROVAL</b>	<b>ii</b>
<b>SELF DECLARATION AGAINST PLAGIARISM</b>	<b>iii</b>
<b>ABSTRACT</b>	<b>iv</b>
<b>ABSTRAK</b>	<b>v</b>
<b>DEDICATION</b>	<b>vi</b>
<b>ACKNOWLEDGMENTS</b>	<b>vii</b>
<b>PREFACE</b>	<b>viii</b>
<b>CONTENTS</b>	<b>ix</b>
<b>LIST OF TABLES</b>	<b>xi</b>
<b>LIST OF FIGURES</b>	<b>xii</b>
<b>LIST OF NOTATIONS</b>	<b>xiii</b>
<b>1 INTRODUCTION</b>	<b>1</b>
1.1 Rationale . . . . .	1
1.2 Theoretical Framework . . . . .	2
1.3 Conceptual Framework/Paradigm . . . . .	3
1.4 Statement of the Problem . . . . .	3
1.5 Objective and Hypotheses . . . . .	3
1.6 Assumption . . . . .	4
1.7 Scope and Delimitation . . . . .	4
1.8 Significance of the Study . . . . .	4
<b>2 REVIEW OF RELATED WORK AND ALGORITHM DESIGN</b>	<b>5</b>
2.1 Review of Group Recommender System . . . . .	5
2.2 Review of Autoencoder in Recommender System . . . . .	6
<b>3 RESEARCH METHODOLOGY</b>	<b>7</b>
3.1 Research Design . . . . .	7
3.2 Dataset . . . . .	7
3.3 Group Recommender System . . . . .	8
3.4 Collaborative Filtering . . . . .	9

---

3.5	Sparse Autoencoder . . . . .	10
3.6	Aggregation Strategy . . . . .	13
3.7	Evaluation Metrics . . . . .	16
<b>4</b>	<b>PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA</b>	<b>18</b>
4.1	Presentation of Data . . . . .	18
4.2	Result and Analysis . . . . .	18
<b>5</b>	<b>CONCLUSION AND RECOMMENDATIONS</b>	<b>25</b>
5.1	Conclusions . . . . .	25
5.2	Recommendations . . . . .	25
	<b>BIBLIOGRAPHY</b>	<b>27</b>