Table of Contents

Recommendation	i
Approval Sheet	ii
Acknowledgement i	ii
Abstract i	ιV
Chapter 1: Introduction	
A. Background of the Study	1
B. Existing Algorithms	5
C. Statement of Problems	6
D. Objectives of the Study	3
E. Importance of the Study	4
F. Significance of the Study	5
G. Scope and Limitation	6
H. Definition of Terms	7
Chapter 2: Related Literature and Studies	
A. Foreign Literature and Studies	0
B. Local Literature and Studies	9
C. Synthesis	1
Chapter 3: Design and Methodologies	
A. Existing and Enhanced Algorithm	2
B. Overview of Current Technologies	6
C. Overview of Technologies Used	8
D. Requirement Analysis	9

E. Design Principles	41
F. System Architecture	43
G. Platform Services and Components	44
H. Usage and Features	47
Chapter 4. Results and Discussion	
A. Results	49
B. Discussion	50
Chapter 5. Conclusion and Recommendation	
A. Conclusion	51
B. Recommendation	52
Bibliography	

List of Figures

Figure 1. Graph model of NN data with overfitted samples	9
Figure 2. Simulated Training Results (Total Error)	. 11
Figure 3. Simulated Training Results (Total Error Decrease Rate)	. 12
Figure 4. Gradient Descent	. 34
Figure 5. Regulariazation	. 36
Figure 6. Momentum	. 38
Figure 7. A typical Intelligent Personal Assistant Architecture	. 40
Figure 8. Intelora Core Architecture	46

List of Tables

Table 1. Data from NN response after Three Iterations	7
Table 2. Intelligent Personal Assistants Comparison	. 32
Table 3. Performance Results – Existing	. 49
Table 4. Performance Results – Enhanced	. 50

Appendices

- A. Related Literature and Studies
- B. Programming Tools
- C. Sample Input Output
- D. Simulation
- E. Source Code
- F. Authors