

CONTENTS

Abstract	i
Contents	ii
List of Figures	iv
List of Tables	v
1 Introduction	1
1.1 Overview	1
1.2 Problem Statement	2
1.3 Objective	3
1.4 Scope	3
1.5 Hypothesis	3
1.6 Methodology	3
1.7 Summary	4
2 Literature Review	5
2.1 Overview	5
2.2 Reverse K Nearest Neighbour	5
2.3 Influence Zone	6
2.4 Voronoi Diagram	7
2.5 Summary	8
3 System Methodology and Design	9
3.1 Overview	9
3.2 System Flow	9
3.3 Influence Zone Expansion	9
3.4 Influence Zone Expansion: Query	11
3.5 System Requirements Specification	12
3.6 Summary	12
4 Testing and Analysis	13
4.1 Overview	13
4.2 Testing Objective	13

4.3	Testing Scenario	13
4.4	Testing Result	14
4.4.1	Influence Zone Expansion Execution Time	14
4.4.2	Influence Zone Expansion and Query Execution Time . . .	14
4.4.3	Influence Zone Expansion Storage usage and Segment Dis- tributions	16
4.5	Summary	17
5	Conclusions and Recommendations	18
5.1	Conclusions	18
5.2	Future Work	18
	Bibliography	19