

## Table of Contents

<b>Chapter</b>	<b>Topics</b>	<b>Page No.</b>
<b>CHAPTER 1</b>	Introduction	1
1.1	Data Mining Standards	1
1.2	Spatial data	1
1.3	Spatial data clustering	2
1.4	Motivation	3
1.5	Aim of our work	4
<b>CHAPTER 2</b>	Background of the Work	5
2.1	Proximity measurement for Spatial data	5
2.2	Comparison of Proximity measures	6
2.3	Clustering Approaches	7
2.3.1	Partitioning Techniques	7
2.3.1.1	Analysis of K-Mean method	7
2.3.2	Hierarchical methods	8
2.3.3	Grid-based methods	9
2.3.4	Density-based methods	10
2.3.4.1	DBSCAN	10
2.3.4.2	IDBSCAN	11
2.3.4.3	KIDBSCAN	11
2.3.4.4	OPTICS	11
2.3.4.5	DENCLUE	12
2.3.4.6	EnDBSCAN	12
2.3.4.7	EDBSCAN	12
2.3.4.8	DD_DBSCAN	13
2.3.4.9	DDSC	13
2.3.4.10	VDBSCAN	13
2.3.4.11	DVBSCAN	13
2.3.4.12	SEDBSCAN	14
2.3.5	Model-based methods	14
2.4	Cluster validity measures	14
2.5	Discussion	15
<b>CHAPTER 3</b>	Proposed Method (VDSC)	17
3.1	Variable Density Spatial Clustering(VDSC)	17
3.2	VDSC method for 2-D datasets	19

3.3	Explanation of VDSC method	20
3.4	Variable Density Spatial Clustering for Image (VDSC-I)	20
3.5	VDSC-I method for image datasets	23
<b>CHAPTER 4</b>	Performance Evaluation	25
4.1	Synthetic datasets	25
4.2	Real datasets	25
4.3	Dataset description	26
4.4	Experimental results	27
4.5	Comparison	31
4.6	Cluster quality	32
<b>CHAPTER 5</b>	Conclusion and Future Scope	34
	Bibliography	35