

Acknowledgements

With a deep sense of appreciation, I would like to acknowledge the support of all those people who have directly or indirectly been an integral part of my work.

I bow down on the lotus feet of Shreeji Bawa and Kuldevi and pray that they continue showering their blessings on me. My faith and belief in them has helped me throughout this research period.

It is a matter of privilege and pleasure to express my appreciation towards my guide Dr. Anjali Jivani for her motivation, technical guidance and constant support throughout this work. She has been like a mother figure for me and I am highly indebted to her for her vision and direction, which helped me select this subject of research. Her critical comments and innovative suggestions encouraged me to complete this work successfully. I feel extremely lucky to have an opportunity to work under her.

I am grateful to Dr. Apurva Shah, the Head of the Computer Science and Engineering Department for his sincere support and co-operation during this period. The judicious ideas of the Departmental Research Committee drove me in the right path towards the completion of this work. I acknowledge them all ardently.

I wish to thank all my colleagues and friends for their support throughout this journey without which this herculean task would have been a very arduous one. Especially I would like to thank Ms. Lokapavana Hebbale, Mr. Ankit Shah, Mr. Kshitij Gupte, Mr. Vishwas Raval, Mr. Vatsal Shah and Mr. Vishal Patel for their assistance in this research.

To the most important person in my life and the backbone of my family, my wife Khushbu and to my son Parva, I extend my heartfelt gratitude for bearing with me for the inconvenience during this period of my research work and for motivating me in this strenuous but enjoyable journey.

In addition, I express my gratitude to my parents, parents-in-law, brother, sister-in-law and my nephew Panav who have been a constant source of inspiration for me.

This work would not have been possible without the research work carried out by other researchers and authors in this field. I am highly obliged to all the authors whose work I have referred and carried forward.

I am thankful to all my friends, well-wishers, whom I may have forgotten to mention explicitly here.

Chintan V. Shah