

ACKNOWLEDGEMENT

All praise, glory and honour to the Lord Almighty and my Saviour for in Him I trust and with Him this success was possible.

I express my deep sense of gratitude and profound thanks to my research supervisor **Dr. H. Khanna Nehemiah**, Associate Professor, Ramanujan Computing Centre, Anna University, Chennai, for his excellent guidance, motivations and support rendered throughout this research work.

I express my sincere thanks to my doctoral committee members **Dr. R. M. Chandrasekeran**, Professor, Department of Computer Science & Engineering, Annamalai University and **Dr. K. Narayansamy**, Professor, Department of Information Science & Technology, CEG campus, Anna University for their valuable suggestions and support during the course of my research work.

I thank the faculty and non-teaching staff members in the Department of Computer Technology, MIT campus, Anna University, Chennai for their valuable support throughout the course of my research work. I thank my friends for all their support and encouragements for the completion of this research.

I am grateful to God for blessing me with a wonderful family who were my moral supporters all through this research work. I thank my husband who is my real pillar of motivation and understanding. I thank my mother for all the support she has given me for taking care of my son in times of this research work. I thank my son for all his support and tolerance. I thank my in-laws, siblings and father for their constant prayers and encouragements.

NANCY JANE Y