ACKNOWLEDGEMENT

Foremost, I sincerely express my gratitude and thanks to my supervisor, Dr. S. Swamynathan, Associate Professor, Department of Information Science and Technology, Anna University, Chennai for his continuous help, guidance and motivation throughout the course of my doctoral program and his constructive suggestions on the preparation of the dissertation.

With profound reference and high regards, my sincere thanks to the doctoral committee members, Dr. Arul Siromoney, Professor, Department of Computer Science and Engineering, Anna University, Chennai, Dr. V. Ramalingam, Professor and Head, Department of Computer Science and Engineering, Annamalai University, Chidambaram, Tamilnadu. I am thankful to Dr. A. Kannan, Professor and Head, Department of Information Science and Technology, Anna University, Chennai and all teaching and non-teaching faculties for providing infrastructural support in doing this research.

I have been motivated and helped by friends throughout the thesis work. Finally, I thank my family members for their love, support, encouragement, prayers as well as understanding and patience.

DEEPA R