ACKNOWLEDGEMENT

The author wishes to place on record his deep sense of gratitude to his guide Dr. C. CHELLAPPAN, Professor, School of Computer Science and Engineering, Anna University, Chennai, India, for his valuable suggestions, encouragement and excellent guidance throughout the course of this thesis work.

The author wishes to thank Dr. V. SANKARANARAYANAN, Director, Ramanujan Computing Centre, Anna University, Chennai for his well wishes and encouragement during this work.

The author wishes to thank Dr. K. M. MEHTA, Director, School of Computer Science and Engineering and Dr. P. NARAYANASAMY, Asst. Professor, Ramanujan Computing Centre for their constant encouragement during this work.

The author wishes to express his sincere thanks to all the staff members of the Ramanujan Computing Centre for their well wishes and timely help.

The author wishes to thank Doctoral Committee Members. The author sincere thanks to the reviewers for their valuable commands to improve the thesis.

The author wishes to thank the authorities of Anna University for providing all the facilities needed for carrying out this research work.

Finally, greatest thanks go to his parents and brother. This work would not have been possible without their love and inspiration.