

ACKNOWLEDGEMENTS

I owe my gratitude to all those people who have made this research work possible and because of whom my experience has been one that I will cherish forever.

I am grateful to **Dr. Francis C. Peter**, Vice Chancellor, St. Peter's University Chennai, for giving me an opportunity to carry out my research in the University.

I also thank **Dr.M.A.Dorai Rangasamy**, Registrar, St.Peter's University Chennai and **Dr.S. Gunasekaran**, Dean (R&D), St. Peter's University, Chennai, for their constant help and support.

I also offer my sincerest gratitude to my supervisor, **Dr. A. Kathirvel**, Professor, Department of Computer Science and Engineering, MNM Jain Engineering College, Chennai, who has supported me throughout my thesis with his patience and knowledge whilst allowing me the room to work in my own way. Without his valuable assistance, this work would not have been completed.

I am grateful to **Dr. S. Pushpa**, Professor, Department of Computer Science and Engineering, St.Peter's University Chennai and **Dr. N. Rengarajan**, Professor, Department of Computer Science and Engineering, Vel Tech Multitech Dr.RR and Dr.SR Engineering College Chennai, for guiding me as doctoral committee members for my research.

Finally, I would like to thank all those who were directly or indirectly helpful in carrying out this research.