ACKNOWLEDGEMENTS

There are many people who have helped me during my tenure as a Ph.D. student. I would like to thank them all for the positive influence they have shown.

- Firstly, I would like to a very big thank to my Research Advisor Dr. M. Vanitha, Ph.D., Assistant Professor, Department of Computer Applications, Alagappa University, Karaikudi for her guidance, encouragement and feedback throughout the work. Without her guidance and constant feedback this PhD would not have been achievable.

- I would like to thank to my Co-guide Dr. S. Manikandan, Ph.D., Assistant Professor, P.G. and Research Department of Computer Science, J.J. College of Arts and Science (Autonomous), Pudukkottai.

- I extend my sincere thanks to Mr.N.Subramanian, Secretary, Karpaga Vinayaga Educational Trust and Dr. Kavitha Subramanian, Executive Trustee, Karpaga Vinayaga Educational Trust for permitting me to pursue the research work in our college.

- A special word of thanks is due to Dr. J.Parasuraman, Principal, J.J.College of Arts and Science (Autonomous), Pudukkottai who was a source of encouragement and inspiration at every step.

- I would like to thank member of Doctoral Committee Dr. E. George Dharma Prakash Raj, Ph.D., Assistant Professor, Department of Computer Science and Engineering, Bharathidasan University, Tiruchirappalli and Dr. T.N. Ravi, Ph.D., Assistant Professor, Department of Computer Science, Periyar E.V.R. College, Tiruchirappalli, who have given their valuable suggestion throughout my course of work.
• Thanks and also due to **Prof. Dr. K. Jayaprakash**, Head, R&D Cell, KVCET, Chennai for his support and the presentation.

• Eventually, needless to say that my gratitude goes towards all my friends who supported me in this adventure.

• Finally and most important thanks are due to my mother, wife and children for their everlasting support and constant motivation without their help nothing would be possible.

(K.SELVAN)