ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my research supervisor Dr A. Govardhan, Professor of CSE & Principal, JNTUH College of Engineering, Nachupally, Karimnagar, for accepting me readily as a research scholar and also giving me for his valuable feedback, and suggestions which have added greatly to the value of this thesis. Beyond his supervision, his kindness and support throughout the research period has been highly valuable.

I would not have been what I am today without the inspiration given by Dr. M. Manzoor Hussain, Professor, Dept of Mechanical Engineering, J N T U H, Hyderabad.

I would like to thank Dr. S. Mahaboob Basha, Professor, Al-Habib College of Engineering, Hyderabad for his support throughout my work. His reviews and evaluations of my work were very much useful for me to improve my work.

I would like to thank Dr. P. Ravi Kumar, Professor, National Institute of Technology, Warangal for his support throughout my work.

I am very much thankful to Dr L. Pratap Reddy Professor and Head, Dept of Electronics and Communication Engineering, JNTUH, Hyderabad for his encouragement and moral support for the completion of my work. Without his inspiration I would not have started my research work.
Finally I express my sincere thanks to the authorities of JNTUH for providing the necessary infrastructure for the completion of my research work.

I thank my parents and family for supporting me in all the aspects. Very special thanks are extended to my wife and children for encouraging me throughout this long time consuming work with immense patience, which took many hours from them.

M.BALRAJU