ACKNOWLEDGEMENT

The author is highly indebted to his Supervisor, Dr.S.N.Sivanandam, Professor and Head of Electrical and Electronics Engineering, PSG College of Technology, Coimbatore for his valuable guidance, inspiring advice and continued encouragement with the author at all stages of the thesis work. His timely suggestions, fruitful discussions with the author and careful study during the preparation of the thesis are gratefully acknowledged.

The author express his sincere gratitude to Dr.P.RadhaKrishnan, Principal, PSG College of Technology, Coimbatore for his constant encouragement and facilities provided in the college for the completion of this work.

For the facilities provided, the author’s thanks are due to the Management of PSG College of Technology, Coimbatore.

The author thanks the Ministry and Authorities of Tamilnadu State Council for Science and Technology, Chennai, for providing research grants under TNSCST/S&T PROJ/ETOI /98-99/1732.

The author expresses his sincere thanks to his colleagues for stimulating discussions and encouragement.

The author is very much thankful to Thiru. N.Mathiyazhagan, IMR Global Corp., Thiru. M.Krishnamoorthy, Hewlett Packard, and Thiru. Vipin Vijayakumar, Tennese Technology, for their invaluable help and thoughtful suggestions.

The author wishes to express his sincere thanks to Tmt. S.Shanmuga Priya, Tata Consulting Servies, Thiru. G.Sainarayananan,
Univ. of Malaysia Sabah, A.Ramesh, Research Centre Imarth, and V.Balaji, Sathyam Software for their kind help.

The author records his sincere thanks to all his student friends for their invaluable support.

But first, last and always, the author wishes to thank his wife Tmt. Hema Paulraj, Manager-Information System, TNEB, for her patience and advice when asked, during the writing of this thesis (as well as other times).