Acknowledgements

The author would like to express his gratitude to Prof. Sanjeev Gupta, for his valuable guidance, assistance and tolerance throughout the course of this research work.

In addition, the author is most grateful to the Director, DA-IICT for his permission to pursue this research at DA-IICT. Thanks are due to Prof. Samaresh Chatterji, Prof. V.P. Sinha, Prof. Deepak Ghodgaonkar, Prof. C. Vijaykumar, Prof. Hemant Patil for their cooperation and encouragement during this research work.

The author also acknowledges the support of DA-IICT for providing financial assistance and making available various resources required to carry out this research work. The author is also thankful to his parent Institute, Terna Engineering College, Navi Mumbai for granting study leave for this research work.

Further the author would like to express particular thanks to his family members for their continued patience and understanding.