

ACKNOWLEDGEMENT

Foremost, I would like to express my heartfelt gratitude to **His Divine soul Padmabhushan Sri Sri Sri Dr.Balagangadharanatha Maha Swamiji**, Founder president, Sri Adichunchanagiri Mutt, Karnataka.

I am grateful to **His Holiness Jagadguru Sri Sri Sri Nirmalanandanatha Maha swamiji**, President, Sri Adichunchanagiri Mutt, Karnataka.

With utmost sincerity, I extended my thanks to **Reverend Sri Sri. Prakashnath Swamiji**, Managing Director, S.J.B. Institute of Technology, Karnataka.

I would like to thank **Dr. Puttaraju.**, Principal, S.J.B. Institute of Technology, Bangalore, for his invaluable guidance, constant support and consistent encouragement throughout the period of my research work.

I wish to express my wholehearted thanks and respect to **Dr. Nataraj K.R.** for his guidance, support and patience during my graduate program. He has been an invaluable source of knowledge and has certainly helped inspire many of the ideas expressed in this thesis. Thank you for treating me with respect and timely advice throughout my graduate studies.

I express my sincere gratitude to **Dr. Sandeep Shastri** Pro vice chancellor, Jain University and Dean engineering, Jain University for their moral support and continuous encouragement.

I record my hearty gratitude to **Dr. Rekha K.R.**, Professor, S.J.B. Institute of Technology, Bangalore for her constant guidance and support, throughout the period of my research work.

I would like to thank my parents **Shri. Srikantaswamy N** and **Smt. Gowramma T.C** for providing constant help, advice and mental and moral support while conducting my research.

I extend my warm thanks to Rajanna **T.N** for his blessing and support during my research work.

I would like to thank my wife **Mrs. Sharmila N**, my in-laws **Shri Nagaraju** and **Smt Shylaja** for their support and help throughout my research work.

I thank all the faculty members and staff whom I worked with and took guidance from throughout my throughout my research.

MALLIKARJUNASWAMY S