ACKNOWLEDGEMENT

I take this opportunity to express my sincere gratitude to my mentor Dr. Indu Chhabra, Professor, Department of Computer Science and Applications, Panjab University, Chandigarh. Her constant guidance and scientific approach helped me to streamline my ideas. Her unfailing support and reliable inputs time to time created a roadmap for me. Heartfelt thanks to The Almighty who gave me strength and benevolent blessings to complete this research work.

I owe a special debt of gratitude to Dr. Sonal Chawla, Chairperson, Department of Computer Science and Applications and Dr. R. K. Singla for providing me with the resources and their valuable guidance. My heartfelt thanks to Dr. M. Shyamala Devi for her reliable suggestions and Dr Anu Gupta for providing me support and sharing inspiring words to progress. My thanks to all the office staff members of the department for providing resources and extending their support.

In addition, I would like to thank the owners and server administrators of all the institutes and companies, who expressed faith in me and gave me authority to do the research work on their websites. Without their support this work would not have been completed.

I would like to extend my sincere thanks to my senior Dr. Preet Kanwal for lending me her untiring support and guidance throughout my research work. I am also grateful to my senior Mandeep Kaur whose timely support and rich ideas helped me to compile my work. I am indebted to all my friends and fellows for their wishes and cooperation during my testing times.

I owe my special thanks to my husband, Abhishek Arora whose encouragement and support throughout remains motivating for me to achieve this. I would like to thank my loving son Shaurya Veer, who had to bear with me in my absence. Sweet words of encouragement from my family members to finish the work have been an asset.

Rohini