ACKNOWLEDGEMENT

The phase of submission of Ph.D. thesis! Is it towards the end of an academic life or is it a beginning? or neither? Surprisingly to me it is YES. After submission and then just getting awarded Ph.D. is an end of academic life because no more degree is required for any promotion. During that phase a person finds himself or herself somewhat contented or develops some level of confidence to carry out a research work independently. Hence, it is a beginning of an academic life. However, there are certain persons who are in neither category. They struggle for achieving their goals and Ph.D. comes as a byproduct, not the main product. I really wished to be in that category but still...

In carrying out this work, I have gone through different phases. The greed and determination to do some creative work was there since from the beginning by the grace of Almighty. It was also supported by my respected grandparents and parents and brothers and sister. A person dreams something of his liking and then desires to accomplish it. But in spite all resources and leisure the dream doesn’t get materialized. To accomplish it there is a necessity of good academician. However, just an academician though great does not segregate things unless that academician weighs human values. I have been fortunate enough by the grace of Almighty to have a great personality whose endowment not only guided academically but in a very crucial phase of my life helped me which I cannot express in words. He is Dr. D.K. Lobiyal. My Great Supervisor! In fact it is fuzzified to do away with my responsibility just by expressing thanks to him, but it is one of the noble occasions I must express my gratitude and acknowledge him. Basically it is not only that reason for expressing his gratitude to acknowledge that he is my Ph.D. Supervisor but it is his virtues which compel a person to eulogize him and feel obliged under his guidance, be it related to academic, social or any other kind. To work under his guidance is itself a great. He is too simple, noble, straight forward, cooperative, social, very hardworking and kind-hearted besides good academician. I do not hesitate to say that without his support this work could not be possible. I am really indebted to him. I would also express my sincere thanks to Professor Karmeshu, Dean and Professor K.K. Bhardwaj, Ex-Dean, School of Computer and Systems Sciences, Jawaharlal Nehru University. It will be injustice at my part if I do not acknowledge Ms. Usha Kaushik, Secretary, Dean Office, School of Computer and Systems Sciences. She is too nice to put in words. I express my special thanks to her.

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