



Indian Institute of Technology Kharagpur, India
Department of Mathematics

Dr. Sourav Mukhopadhyay
Professor

Date: March 5, 2022

TO WHOM IT MAY CONCERN

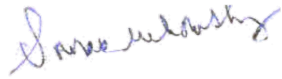
It gives me immense pleasure to write a letter of recommendation for Mr. Ravi Dhiman for admission to the Ph.D. program to IIT KGP-University of Manchester Dual Doctoral Degree program. I know him since 2017 when he enrolled in MS at the Indian Institute of Technology (IIT) Kharagpur, India. I am his joint supervisor. I also taught him Cryptography and Network Security as coursework in his MS. His problem solving skills was very good during the coursework and I could see his love towards Cryptography. He worked very hard throughout the course and got the grade Ex (Ex is the highest grade on an evaluation sheet). In his MS thesis, he studied the Controller Placement Problem in Software-Defined Networking and proposed the energy-aware and mobility-aware schemes for the controller placement. Later he joined as a Junior Research Fellow in a project entitled, “Development of Multi-Party Computation Protocols as an Aid to Cloud Computing” with me.

Based on the frequent discussions with him on his research, I will say that he is well equipped with the basic concepts of Mathematics and Computer Science. He is a remarkable student with a keen research interest and has the ability to learn new things. I found him very sincere, responsible and dedicated to his research work. One of his qualities is that he deeply gets involved in his work. During the discussion on research work, he used to come up with unique and innovative ideas. With his quality of self-motivation and confidence, he has published a research article in IEEE Transactions on Vehicular Technology and another one is submitted to IEEE Transactions on Green Communications and Networking. Thus I must say that his focus on articulating his industrious effort into research publication is commendable. I am quite confident that he is a worthy candidate for this Ph.D. program.

As a person, I found Ravi Dhiman to be warm- hearted. He has a calm and composed mind. His excellent communication skills and creativity were evident from his absorbing presentation. I believe that he would definitely be a very effective member of any vibrant research community.

I strongly recommend him for admission to this Ph.D. program. I wish him all the success in his future endeavors.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sourav Mukhopadhyay', with a stylized flourish at the end.

Dr. Sourav Mukhopadhyay
Professor
Department of Mathematics
Indian Institute of Technology Kharagpur
INDIA