



Mohammad Tanveer

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Topic: Optimization methods and algorithms for non-parallel support vector machines

Abstract:

In this talk, I will discuss twin support vector machines (TWSVM), a binary SVM classifier that determines two nonparallel planes by solving two related SVM-type problems, each of which is smaller than in a conventional SVM. The twin SVM formulation is in the spirit of proximal SVMs via generalized eigenvalues. Further, few recent variants of TWSVM will be discussed to show their performances and applications to real-world problems.

Bio:

Dr. M. Tanveer is Assistant Professor and Ramanujan Fellow at the Discipline of Mathematics of the Indian Institute of Technology, Indore. Prior to that, he spent one year as a Postdoctoral Research Fellow at the Rolls-Royce@NTU Corporate Lab of the Nanyang Technological University, Singapore. He received the Ph.D. degree in Computer Science from the Jawaharlal Nehru University, New Delhi, India. His research interests include support vector machines, optimization, applications to Alzheimer's disease and dementias, biomedical signal processing, and fixed point theory and applications. He has published over 24 referred journal papers of international repute. He is the recipient of 2017 SERB-Early Career Research Award in Engineering Sciences, and the only recipient of 2016 DST-Ramanujan Fellowship in Mathematical Sciences which are the prestigious awards of INDIA at early career level. He has invited as Visiting Professor at UFMG, Brazil during June-July, 2018. He is the Section Editor of Smart Science, Taylor & Francis Journal and editorial review board member of Applied Intelligence, Springer (International Journal of Artificial Intelligence, Neural Networks, and Complex Problem-Solving Technologies). He has also co-edited one book in Springer on machine intelligence and signal analysis. He has also been an organizer and distinguished/plenary/invited speaker in many international conferences, winter schools, and symposiums. Dr. Tanveer is currently the Senior Member of IEEE and Principal Investigator of 04 major research projects funded by Government of India including Department of Science and Technology (DST), Science & Engineering Research Board (SERB) and Council of Scientific & Industrial Research (CSIR).