

Indian Institute of Technology Kanpur



INSTITUTE LECTURE SERIES

January 04, 2024 (Thursday) | 5.00 pm | L- 17

Speaker: Prof. Rajesh K. Gupta

Talk Title: The Emerging Discipline of Data Science

About the Speaker

Rajesh Gupta serves as a founding director of the Halicioğlu Data Science Institute and a distinguished professor of Computer Science and Engineering at UC San Diego. His research is in embedded and cyber-physical systems with a focus on sensor data organization and its use in optimization and analytics. His current projects include UCSD DERConnect, a \$39M NSF-sponsored infrastructure testbed for smart buildings and electrical microgrids to decarbonize societal infrastructure, and DARPA/SRC ACE Center for Evolvable Computing. He served as editor-in-chief of IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD) and IEEE Design & Test (D&T) and as founding EIC of IEEE Embedded Systems Letters. Prof. Gupta holds Qualcomm Endowed Chair in Embedded Microsystems at UC San Diego and INRIA International Chair at the French international research institute in Rennes, Bretagne Atlantique. He is a Fellow of the IEEE, the ACM, and the American Association for the Advancement of Science (AAAS).



Abstract of the Talk

We live in a world of data from Twitter/X feeds to gene sequences affecting almost all aspects of our lives. This has got a number of communities excited about the possibilities that pervasive data and its use can bring about, leading to a tremendous rise in new programs and institutes in "Data Science". Yet, data has always been with us and has played a central role in scientific discovery. This talk makes the case that there, indeed, are changes brought about by the ubiquity, scale of data and advances in processing of data that enables us to use data in ways not previously imaginable.

Starting with a bit of historical perspective, the speaker plans to walk the audience through their thinking on the emerging discipline of Data Science, its constituent subjects, and institutional planning over five years that led to establishing a Data Science Institute at UC San Diego. The talk is as much about the subject area, prospective developments in the area as it is about academic institution building.

All are cordially invited to attend
Office of Dean Research & Development