



Spring 2017 Distinguished Lecture Series

Department of Computer and Information Sciences

Big Data Integration

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Abstract: The Big Data era is upon us: data are being generated, collected and analyzed at an unprecedented scale, and data-driven decision making is sweeping through all aspects of society. Since the value of data explodes when it can be linked and fused with other data, addressing the big data integration (BDI) challenge is critical to realizing the promise of Big Data. BDI differs from traditional data integration in many dimensions: (i) the number of data sources, even for a single domain, has grown to be in the tens of thousands, (ii) many of the data sources are very dynamic, as a huge amount of newly collected data are continuously made available, (iii) the data sources are extremely heterogeneous in their structure, with considerable variety even for substantially similar entities, and (iv) the data sources are of widely differing qualities, with significant differences in the coverage, accuracy and timeliness of data provided. This talk presents techniques to address these novel challenges faced by big data integration, and identifies a range of open problems for the community.

Bio: Divesh Srivastava is the head of Database Research at AT&T Labs-Research. He is a Fellow of the Association for Computing Machinery (ACM) and the managing editor of the Proceedings of the VLDB Endowment (PVLDB). He has served as a trustee of the VLDB Endowment, as an associate editor of the ACM Transactions on Database Systems (TODS), as an associate Editor-in-Chief of the IEEE Transactions on Knowledge and Data Engineering (TKDE), and as a general or program committee co-chair of many conferences. He has presented keynote talks at several international conferences, and his research interests and publications span a variety of topics in data management. He received his Ph.D. from the University of Wisconsin, Madison, USA, and his Bachelor of Technology from the Indian Institute of Technology, Bombay, India.