PROF. I.G. SARMA MEMORIAL LECTURE

Toward Data-Driven Education

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Venue: Faculty Hall, Indian Institute of Science
Date: Wednesday, September 28, 2016
Time: 4 - 5 PM

Abstract

A program of study can be viewed as a knowledge graph consisting of learning units and relationships between them. Such a knowledge graph provides the core data structure for organizing and navigating learning experiences. We address three issues in this talk. First, how can we synthesize the knowledge graph, given a set of concepts to be covered in the study program. Next, how can we use data mining to identify and correct deficiencies in a knowledge graph. Finally, how can we use data mining to form study groups with the goal of maximizing overall learning. We conclude by pointing out some open research problems.

About Dr. Rakesh Agrawal

Rakesh Agrawal is the President and Founder of the Data Insights Laboratories. He is a member of the U.S. as well as the Indian National Academy of Engineering, a Fellow of ACM, and a Fellow of IEEE. He has been both an IBM Fellow and a Microsoft Fellow. ACM SIGKDD awarded him its inaugural Innovations Award and ACM SIGMOD the Edgar F. Codd Award. He was named to the Scientific American’s “First list of top 50 Scientists. Rakesh has been granted 80+ patents and published 200+ papers, including the 1st and 2nd highest cited in databases and data mining. Four of his papers have received “test-of-time” awards. His research formed the nucleus of IBM Intelligent Miner that led the creation of data mining as a new software category. Besides Intelligent Miner, several other commercial products incorporate his work, including IBM DB2 and WebSphere and Microsoft Bing.

About Professor I.G. Sarma Memorial Lecture

This prestigious lecture series was instituted in 1997 in memory of Professor I.G. Sarma, the founding chairman of the Department of Computer Science and Automation (then called the School of Automation) during the formative years of 1971-1979. His tenure as the chairman, Centre for Continuing Education and later as the Dean, Faculty of Engineering was marked by many important academic and education initiatives being launched at the Indian Institute of Science. Professor Sarma mainly worked in the areas of Flight Control, Guidance, and Simulation and closely interacted with many of the Aerospace R&D and Flight Vehicle Design Organisations such as the NAL, DRDL, VSSC, and ADA among others. The talk by Dr Agrawal will be the eleventh in the series of lectures.

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ALL ARE WELCOME
High Tea will be served after the talk