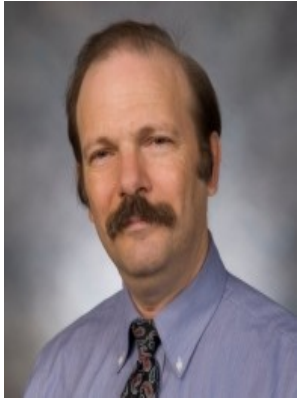




TechniGraphicS Lecture Series

IIT Bombay and TechniGraphicS Foundation invite you to the TechniGraphicS Lecture on Thursday, December 15, 2011.

The details of the lecture are as follows:



Topic : **“And Logic Begat Computer Science: When Giants Roamed the Earth”**

Speaker : **Prof. Moshe Y. Vardi**
Karen Ostrum George Professor in Computational Engineering
Rice University, USA and
Director, Ken Kennedy Institute for Information Technology

Date : Thursday, December 15, 2011

Time & Venue : 5.15 pm, P. C. Saxena Auditorium, IIT Bombay

Abstract :

During the past fifty years there has been extensive, continuous, and growing interaction between logic and computer science. In fact, logic has been called "the calculus of computer science". The argument is that logic plays a fundamental role in computer science, similar to that played by calculus in the physical sciences and traditional engineering disciplines. Indeed, logic plays an important role in areas of computer science as disparate as architecture (logic gates), software engineering (specification and verification), programming languages (semantics, logic programming), databases (relational algebra and SQL), artificial intelligence (automated theorem proving), algorithms (complexity and expressiveness), and theory of computation (general notions of computability). This non-technical talk will provide an overview of the unusual effectiveness of logic in computer science by surveying the history of logic in computer science, going back all the way to Aristotle and Euclid, and showing how logic actually gave rise to computer science.

About the Speaker:

Prof. Moshe Y. Vardi is Karen Ostrum George Professor in Computational Engineering and Director of the Ken Kennedy Institute for Information Technology. His interests focus on applications of logic to computer science, including database theory, finite-model theory, knowledge in multi-agent systems, computer-aided verification and reasoning, and teaching logic across the curriculum.

Prof. Vardi is the recipient of numerous awards, including three IBM Research Outstanding Innovation Awards, the 2000 Gödel Prize, the 2005 ACM Kanellakis Award for Theory and Practice, the 2006 LICS Test-of-Time Award, the 2008 ACM PODS Mendelzon Test-of-Time Award, the 2008 ACM SIGMOD Codd Innovations Award, the 2008 Blaise Pascal Medal for Computer Science by the European Academy of Sciences, the 2008 ACM Presidential Award, the 2010 CRA Distinguished Service Award, and the 2010 ACM Outstanding Contribution Award. He holds honorary doctorates from the University of Saarland, Germany, and the University of Orleans, France.

Prof. Moshe Vardi has authored more than 400 articles in journals, conferences and symposia. He has authored/co-authored 3 books and has edited 9 research volumes. He has served as the editor/associate editor of more than 15 top-notch journals in computer science, and has chaired and led more than 30 scientific committees including those of top-quality computer science conferences, and task forces for policy decisions pertaining to computing.

About Technigraphics Lecture Series

The Technigraphics Lecture Series is made possible by a generous donation from the TechniGraphicS Foundation. Deepak Vaidya (IITB Alumnus of 1970, Chemical Engineering) is one of the trustees of the foundation and also the founder and chairman of TechniGraphicS.

Past Technigraphics Lectures:

A case study of Basic Research and Core Technology -- Prof. Robert Gallager, MIT, USA on September 29, 2008.

Remembering Dr. Homi Jehangir Bhabha – Prof. Devendra Lal, Scripps Institute of Oceanography, San Diego, USA on 22nd January 2009.

Scaling Limits of Large Systems -- Prof. S.R.S. Varadhan, Courant Institute of Mathematical Sciences, New York, USA. on 11th February 2009.

Leonhard Euler -- his life, personality, discoveries and their impact today -- Prof. Dr. Rolf Jeltsch, ETH, Zurich, Switzerland on November 23, 2009.

Modular Biocatalysis – Prof. Chaitan Khosla, Departments of Chemical Engineering, Chemistry and Biochemistry, Stanford University, USA on September 9, 2010

From Ape to Angel: A Neurological Perspective on Human Nature – Dr. V.S. Ramachandran, MD, Ph.D., Distinguished Professor and Director, Center for Brain and Cognition, University of California San Diego and Salk Institute, on December 7, 2010.

