UMR IRISA

UNIVERSITÉ DE RENNES 1

Dans le cadre du **WORKSHOP GIPSy** qui aura lieu les 25- 26- 27 octobre 2011 - organisé par Sophie Pinchinat, (Professeure des Universités et chercheuse à l'IRISA) - **Moshe Y. VARDI** interviendra en anglais sur le thème *'And Logic Begat Computer Science: When Giants Roamed the Earth'.*

OUVERT A TOUS ! Jeudi 27 octobre 2011 de 14 :00 à 15h30
Amphithéâtre A Campus de Beaulieu RENNES (Localisation de l'amphi. A)

Inscription/Registration: web@irisa.fr en précisant "Talk Vardi" dans le sujet du mail.

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.

Bio:
Moshe Y. Vardi is the George Professor in Computational Engineering and Director of the Ken Kennedy Institute for Information Technology at Rice University. He chaired the Computer Science Department at Rice University from January 1994 till June 2002. Prior to joining Rice in 1993, he was at the IBM Almaden Research Center, where he managed the Mathematics and Related Computer Science Department. His research interests include database systems, computational-complexity theory, multi-agent systems, and design specification and verification. Vardi received his Ph.D. from the Hebrew University of Jerusalem in 1981. He is the author and co-author of over 350 articles, as well as two books, "Reasoning about Knowledge" and "Finite Model Theory and Its Applications", and the editor of several collections. He is currently the Editor-in-Chief of the Communications of the ACM.

Vardi is the recipient of numerous awards, including three IBM Outstanding Innovation Awards, the 2000 Goedel 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. Vardi is an editor of several international journals, and Editor-in-Chief of the Communication of ACM. He is Guggenheim Fellow, as well as a Fellow of the Association of Computing Machinery, the American Association for the Advancement of Science, the Association for the Advancement of Artificial Intelligence, and the Institute for Electrical and Electronic Engineers. He was designated Highly Cited Researcher by the Institute for Scientific Information, and was elected as a member of the US National Academy of Engineering, the American Academy of Arts and Science, the European Academy of Sciences, and the Academia Europea.