Distinguished Lecturer Series "Leon the Mathematician" at the Department of Informatics, Aristotle University of Thessaloniki Greece (<u>http://dls.csd.auth.gr</u>)





INVITED LECTURE

Robert A. Kowalski (Professor Emeritus and Senior Research Fellow, Department of Computing, Imperial College, London, UK) is going to lecture on

Artificial Intelligence and Human Thinking

at the Auditorium III of Aristotle University Research Dissemination Center – KE Δ EA AH Θ (September 3rd Avenue, University Campus) on Thursday March 8th, 2012 at 12:00.

ABSTRACT

Research in AI has built upon the tools and techniques of many different disciplines, including formal logic, probability theory, decision theory, management science, linguistics and philosophy. However, the application of these disciplines in AI has necessitated the development of many enhancements and extensions. Among the most powerful of these are the methods of computational logic.

I will argue that computational logic, embedded in an agent cycle, combines and improves upon both traditional logic and classical decision theory. I will also argue that many of its methods can be used, not only in AI, but also in ordinary life, to help people improve their own human intelligence without the assistance of computers.





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ABOUT THE SPEAKER

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Robert Kowalski studied at the University of Chicago, the University of Bridgeport, Stanford University, and the University of Warsaw, before completing his PhD at the University of Edinburgh in 1970. He was a Research Fellow at the University of Edinburgh until 1975, when he joined Imperial College London, becoming Professor of Computational Logic in 1983.

During the 1980s, Kowalski was heavily involved in the British response to the Japanese Fifth Generation Project. At its peak in 1987, the Logic Programming Group, which he headed at the time, numbered approximately 50 researchers and support staff. He also served as an advisor to the UNDP Knowledge Based Systems Project in India and to DFKI, the German Institute for Artificial Intelligence. He co-ordinated the European Community Basic Research Project, Compulog, and was the founder of the European Compulog Network of Excellence. He served as the Head of the Department of Computing at Imperial College from 1997 to 1999, after which he was appointed Professor Emeritus and Senior Research Fellow. Since 2009, he has been an advisor to the World Health Organisation.

Kowalski is a Fellow of the Association for the Advancement of Artificial Intelligence, the European Co-ordinating Committee for Artificial Intelligence, and the Association for Computing Machinery. He received the IJCAI (International Joint Conference of Artificial Intelligence) award for Research Excellence in 2011.

Kowalski's book Computational Logic and Human Thinking – How to be Artificially Intelligent was published by Cambridge University Press in July 2011.