

Symbolic Reasoning Methods in Rewriting Logic and Maude

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Entrada libre hasta completar el aforo

Resumen:

Rewriting logic is both a logical framework where many logics can be naturally represented, and a semantic framework where many computational systems and programming languages, including concurrent ones, can be both specified and executed. Maude is a declarative specification and programming language based on rewriting logic. For reasoning about the logics and systems represented in the rewriting logic framework symbolic methods are of great importance. This talk discusses various symbolic methods that address crucial reasoning needs in rewriting logic, how they are supported by Maude and other symbolic engines, and various applications that these methods and engines make possible. Because of the generality of rewriting logic, these methods are widely applicable: they can be used in many areas and can provide useful reasoning components for other reasoning engines.

Sobre José Meseguer:

José Meseguer is Professor of Computer Science at UIUC and leads the Formal Methods and Declarative Languages Laboratory. He obtained his Ph.D. in Mathematics at the University of Zaragoza, Spain, in 1975. After post-doctoral stays at the University of Santiago de Compostela, and at the University of California at Berkeley, he joined in 1980 the Computer Science Laboratory at SRI International in Menlo Park, California, where he became a Principal Scientist and Head of the Logic and Declarative Languages Group. He joined the University of Illinois at Urbana-Champaign in 2001. He has worked on the design and implementation of several declarative languages, including the OBJ and Maude languages, on formal specification and verification techniques, on concurrency theory, on formal approaches to object-oriented specification, on parallel software and architectures for declarative languages, and on the logical foundations of computer science using equational logic, rewriting logic, and the theory of general logics.

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