Record Nr. UNINA9910484260803321 Titolo Computational logic in multi-agent systems: 4th International Workshop, CLIMA IV, Fort Lauderdale, FL., USA, January 6-7, 2004: revised selected and invited papers / / Jurgen Dix, Joao Leite (eds.) Berlin; New York, : Springer, c2004 Pubbl/distr/stampa 3-540-30200-X **ISBN** Edizione [1st ed. 2005.] Descrizione fisica 1 online resource (XII, 251 p.) Collana Hot topics Lecture notes in computer science, , 0302-9743 ; ; 3259. Lecture notes in artificial intelligence DixJ <1961-> (Jurgen) Altri autori (Persone) LeiteJoao Alexandre Disciplina 004/.015113 Soggetti Computer logic Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Invited Papers -- Distributed Algorithms for Dynamic Survivability of Multiagent Systems -- Programming Groups of Rational Agents --Negotiation in Multi-agent Systems -- An Abductive Framework for Information Exchange in Multi-agent Systems -- Fault Tolerant and Fixed Scalable Structure of Middle-Agents -- Symbolic Negotiation with Linear Logic -- Planning in Multi-agent Systems -- Planning Experiments in the DALI Logic Programming Language -- A New HTN Planning Framework for Agents in Dynamic Environments --Knowledge Revision and Update in Multi-agent Systems -- Revising Knowledge in Multi-agent Systems Using Revision Programming with Preferences -- A New Framework for Knowledge Revision of Abductive Agents Through Their Interaction -- Weighted Multi Dimensional Logic Programs -- (Dis)Belief Change Based on Messages Processing --Learning in BDI Multi-agent Systems -- Learning in BDI Multi-agent Systems -- The Apriori Stochastic Dependency Detection (ASDD) Algorithm for Learning Stochastic Logic Rules. Sommario/riassunto Over recent years, the notion of agency has claimed a major role in de? ning the trends of modern research. In?uencing a broad spectrum of disciplines such as sociology, psychology, philosophy and many more,

the agent paradigm virtually invaded every sub?eld of computer

science, because of its promising applications for the Internet and in robotics. Multi-agent systems (MAS) are communities of problemsolving entities that can perceive and act upon their environments to achieve their individual goals as well as joint goals. The work on such systems integrates many technologies and concepts in arti?cial intelligence and other areas of computing. There is a full spectrum of MAS applications that have been and are being developed: from search engines to educational aids to electronic commerce and trade. Although commonly implemented by means of imperative languages, mainly for reasons of e?ciency, the agent concept has recently increased its in?uence in the research and development of computational logic-based systems. Computational logic, by virtue of its nature both in substance and method, providesawell-de?ned, general, and rigorous framework for systematically stu-ing computation, be it syntax, semantics, and procedures, or implementations. environments, tools, and standards. Computational logic approaches problems, and provides solutions, at a su?cient level of abstraction so that they generalize from problem domain to problem domain, a?orded by the nature of its very foundation in logic, both in substance and method, which constitutes one of its major assets.