Record Nr. UNINA9910143603303321 Advances in Learning Classifier Systems: Third International Workshop, **Titolo** IWLCS 2000, Paris, France, September 15-16, 2000. Revised Papers // edited by Pier L. Lanzi, Wolfgang Stolzmann, Stewart W. Wilson Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa . 2001 **ISBN** 3-540-44640-0 Edizione [1st ed. 2001.] 1 online resource (VIII, 280 p.) Descrizione fisica Lecture Notes in Artificial Intelligence;; 1996 Collana 006.3/1 Disciplina Soggetti Artificial intelligence Computers Mathematical logic Artificial Intelligence Theory of Computation Mathematical Logic and Formal Languages Computation by Abstract Devices Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Theory -- An Artificial Economy of Post Production Systems -- Simple Nota di contenuto Markov Models of the Genetic Algorithm in Classifier Systems: Accuracy-Based Fitness -- Simple Markov Models of the Genetic Algorithm in Classifier Systems: Multi-step Tasks -- Probability-Enhanced Predictions in the Anticipatory Classifier System -- YACS: Combining Dynamic Programming with Generalization in Classifier Systems -- A Self-Adaptive Classifier System -- What Makes a Problem Hard for XCS? -- Applications -- Applying a Learning Classifier System to Mining Explanatory and Predictive Models from a Large Clinical Database -- Strength and Money: An LCS Approach to Increasing Returns -- Using Classifier Systems as Adaptive Expert Systems for Control -- Mining Oblique Data with XCS -- Advanced Architectures --A Study on the Evolution of Learning Classifier Systems -- Learning Classifier Systems Meet Multiagent Environments -- The Bibliography

-- A Bigger Learning Classifier Systems Bibliography -- An Algorithmic

Description of XCS.

Sommario/riassunto

Learning classi er systems are rule-based systems that exploit evolutionary c- putation and reinforcement learning to solve di cult problems. They were - troduced in 1978 by John H. Holland, the father of genetic algorithms, and since then they have been applied to domains as diverse as autonomous robotics, trading agents, and data mining. At the Second International Workshop on Learning Classi er Systems (IWLCS 99), held July 13, 1999, in Orlando, Florida, active researchers reported on the then current state of learning classi er system research and highlighted some of the most promising research directions. The most interesting contri- tions to the meeting are included in the book Learning Classi er Systems: From Foundations to Applications, published as LNAI 1813 by Springer-Verlag. The following year, the Third International Workshop on Learning Classi er Systems (IWLCS 2000), held September 15{16 in Paris, gave participants the opportunity to discuss further advances in learning classi er systems. We have included in this volume revised and extended versions of thirteen of the papers presented at the workshop.