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Altri autori (Persone)	FurbachUlrich
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talks -- Hierarchy in Fluid Construction Grammars -- Description Logics in Ontology Applications -- 175 Miles Through the Desert -- Knowledge Representation and Reasoning -- A New n-Ary Existential Quantifier in Description Logics -- Subsumption in w.r.t. Hybrid TBoxes -- Dependency Calculus: Reasoning in a General Point Relation Algebra -- Temporalizing Spatial Calculi: On Generalized Neighborhood Graphs -- Machine Learning -- Design of Geologic Structure Models with Case Based Reasoning -- Applying Constrained Linear Regression Models to Predict Interval-Valued Data -- On Utilizing Stochastic Learning Weak Estimators for Training and Classification of Patterns with Non-stationary Distributions -- Noise Robustness by Using Inverse Mutations -- Diagnosis -- Development of Flexible and Adaptable Fault Detection and Diagnosis Algorithm for Induction Motors Based on Self-organization of Feature Extraction -- Computing the Optimal Action Sequence by Niche Genetic Algorithm -- Diagnosis of Plan Execution and the Executing Agent -- Automatic

Abstraction of Time-Varying System Models for Model Based Diagnosis  
-- Neural Networks -- Neuro-Fuzzy Kolmogorov's Network for Time  
Series Prediction and Pattern Classification -- Design of Optimal Power  
Distribution Networks Using Multiobjective Genetic Algorithm -- New  
Stability Results for Delayed Neural Networks -- Planning --  
Metaheuristics for Late Work Minimization in Two-Machine Flow Shop  
with Common Due Date -- An Optimal Algorithm for Disassembly  
Scheduling with Assembly Product Structure -- Hybrid Planning Using  
Flexible Strategies -- Controlled Reachability Analysis in AI Planning:  
Theory and Practice -- Robotics -- Distributed Multi-robot Localization  
Based on Mutual Path Detection -- Modeling Moving Objects in a  
Dynamically Changing Robot Application -- Heuristic-Based Laser Scan  
Matching for Outdoor 6D SLAM -- A Probabilistic Multimodal Sensor  
Aggregation Scheme Applied for a Mobile Robot -- Behavior  
Recognition and Opponent Modeling for Adaptive Table Soccer Playing  
-- Cognitive Modelling / Philosophy / Natural Language -- Selecting  
What Is Important: Training Visual Attention -- Self-sustained Thought  
Processes in a Dense Associative Network -- Why Is the Lucas-Penrose  
Argument Invalid? -- On the Road to High-Quality POS-Tagging.

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#### Sommario/riassunto

This volume contains the research papers presented at KI 2005, the 28th German Conference on Artificial Intelligence, held September 11-14, 2005 in Koblenz, Germany. KI 2005 was part of the International Conference Summer Koblenz 2005, which included conferences covering a broad spectrum of topics that are all related to AI: tableau-based reasoning methods (TABLEAUX), multi-agent systems (MATES), automated reasoning and knowledge representation (FTP), and software engineering and formal methods (SEFM). The Program Committee received 113 submissions from 22 countries. Each paper was reviewed by three referees; after an intensive discussion about the borderline papers during the online meeting of the Program Committee, 29 papers were accepted for publication in this proceedings volume. The program included three outstanding keynote talks: Ian Horrocks (University of Manchester, UK), Luc Steels (University of Brussels and Sony) and Sebastian Thrun (Stanford University), who covered topics like logical foundation, cognitive abilities of multi-agent systems and the DARPA Grand Challenge. KI 2005 also included two excellent tutorials: Techniques in Evolutionary Robotics and Neurodynamics (Frank Pasemann, Martin Hulse, Steven Wisemann and Keyan Zahedi) and Connectionist Knowledge Representation and Reasoning (Barbara Hammer and Pascal Hitzler). Many thanks to the tutorial presenters and the tutorial chair Joachim Hertzberg. Peter Baumgartner, in his role as a workshop chair, collected 11 workshops from all areas of AI research, which also includes a meeting of the German Priority Program on Kooperierende Teams mobiler Roboter in dynamischen Umgebungen. I want to sincerely thank all the authors who submitted their work for consideration and the Program Committee members and the additional referees for their great effort and professional work in the review and selection process. Their names are listed on the following pages.

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