

1. Record Nr.	UNISA996466264703316
Titolo	Multi-disciplinary Trends in Artificial Intelligence [[electronic resource]] : 5th International Workshop, MIWAI 2011, Hyderabad, India, December 7-9, 2011. Proceedings / / edited by Chattrakul Sombattheera, Arun Agarwal, Siba K Udgata, Kittichai Lavangnananda
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2011
ISBN	3-642-25725-9
Edizione	[1st ed. 2011.]
Descrizione fisica	1 online resource (444 p. 119 illus., 51 illus. in color.)
Collana	Lecture Notes in Artificial Intelligence ; ; 7080
Disciplina	006.3
Soggetti	Artificial intelligence Application software Computer communication systems Information storage and retrieval Database management Algorithms Artificial Intelligence Information Systems Applications (incl. Internet) Computer Communication Networks Information Storage and Retrieval Database Management Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Intro -- Title Page -- Preface -- Organization -- Table of Contents -- Associated Near Sets of Distance Functions in Pattern Analysis -- Introduction -- Preliminaries -- Topological Structures: Filters, Grills, Cluster Points -- Distance and Approach Spaces -- Approach Nearness Spaces -- Clusters in Approach Nearness Spaces -- Cluster Space Patterns -- Conclusion -- References -- Enhancing Cooperation in Distributed Information Systems Using Conviviality and Multi-Context Systems -- Introduction -- Motivating Scenario -- A Use Case from

Social Networks -- Assumptions and Requirements -- Background -- Multi-Context Systems -- Conviviality -- Model -- Formalization of the Use Case Scenario as a Multi-Context System -- Conviviality in Multi-Context Systems -- Discussion -- Summary -- References -- A Rule Based Approach to Group Recommender Systems -- Introduction -- Strategies for GRS -- Social Choice Theory Strategies -- Proposed Method -- Our Learning Algorithm -- Experimental Results -- Related Work -- Conclusions -- References -- Combining Collaborative Filtering and Sentiment Classification for Improved Movie Recommendations -- Introduction -- Collaborative Filtering -- Collaborative Filtering Process -- Sentiment Classification -- Semantic Orientation Approach -- Naive Bayes Machine Learning Approach -- Experimental Setup and Results -- Collecting Film Rating and Review Data -- Performing Collaborative Filtering -- Sentiment Classification of Film Reviews -- Combining the Results for Final Recommendations -- Conclusion -- References -- Automatic Composition and Mediation on Multiple-Language Semantic Web Services -- Introduction -- Description Languages for Semantic Web Services -- OWL-S: Semantic Markup for Web Services -- WSMO: Web Service Modeling Ontology -- Discovery and Composition on Multiple-Language Semantic Web Services.

Web Services Discovery and Matchmaking -- Web Services Composition -- Composition on Multiple-Language Semantic Web Services -- OWL-S and WSMO Composition Algorithm -- Web Services Mediation -- Schema Mapping -- Instance Conversion -- Experiment and Results -- Testing Data -- Results -- Conclusion -- References -- Fibred BDI Logics: Completeness Preservation in the Presence of Interaction Axioms -- Introduction -- Fibring BDI Logics -- Semantics for Mental States with Interaction Axioms -- Conditions on the Fibring Function -- Discussion and Related Work -- References -- Reasoning about DNSSEC -- Introduction -- DNSSEC -- How DNSSEC Works: A Formal Interpretation -- Origin Authentication and Data Integrity: -- Formal Analysis of DNSSEC Using SVO-logic -- SVO Inference Rules -- SVO Axioms -- Axioms for Reasoning about DNSSEC -- Formal Analysis of DNSSEC -- Protocol Analysis -- Implementation Details -- Conclusion and Future Work -- References -- Formalizing and Reasoning with P3P Policies Using a Semantic Web Ontology -- Introduction -- P3P Policy -- Semantic Web Ontology Language -- Data-Purpose Centric Semantics for P3P -- An Ontology for P3P -- Related Work -- Conclusion -- References -- Structural Distance between EL+ Concepts -- Introduction -- Preliminaries -- Distance-Labeled Subsumption Algorithms -- Related Work -- Conclusion -- References -- Fuzzy-Based Trusted Ant Routing (FTAR) Protocol in Mobile Ad Hoc Networks -- Introduction -- Related Works -- A Fuzzy-Based Trusted Node -- Fuzzy Logic -- Design of Fuzzy Interface System -- Description of Proposed Protocol -- Simulation -- Performance Evaluation Parameters -- Result and Discussion -- Conclusions -- References -- Pattern Synthesis Using Fuzzy Partitions of the Feature Set for Nearest Neighbor Classifier Design -- Introduction -- Notation and Definitions. Partition Based Pattern Synthesis -- Hard Partition Based Pattern Synthesis [14] -- Fuzzy Partition Based Pattern Synthesis -- Partition Finding Methods -- Nearest Neighbor (NN) Classification Methods -- Greedy Divide-and-Conquer k-NNC (GDC-k-NNC) -- Experiments -- Data-Sets -- Classifiers for Comparison -- Experimental Results -- Conclusions -- References -- Data Clustering Using Modified Fuzzy-PSO (MFPSO) -- Introduction -- Related Works -- Fuzzy C-Mean Algorithms -- Particle Swarm Optimization -- Modified Fuzzy-PSO (MFPSO) -- Cluster Validity -- Experimental Results -- Conclusions --

References -- Crisp and Soft Clustering of Mobile Calls -- Introduction -- Review of Clustering -- K-Means Clustering -- Fuzzy c-Means Algorithm -- Deriving Rough Clustering from Fuzzy Clustering -- Data and Experimental Design -- Data Preparation and Experimental Design -- Results and Discussions -- Analysis of Crisp and Fuzzy Clustering -- Conclusions -- References -- Association Rule Centric Clustering of Web Search Results -- Introduction -- Related Work -- Proposed Method -- Experiment and Results -- Conclusion -- References -- Handwritten Kannada Vowel Character Recognition Using Crack Codes and Fourier Descriptors -- Introduction -- Related Work -- Database Creation -- Feature Extraction -- Crack Codes -- Fourier Descriptors -- Feature Extraction Algorithm -- Classification -- K-NN Classifier -- SVM Classifier -- Experimental Results -- Conclusions -- References -- A Rule-Based Approach to Form Mathematical Symbols in Printed Mathematical Expressions -- Introduction -- An Overview of Our Approach to ME Recognition -- Proposed Rule-Based Approach to Symbol Formation -- Results and Discussion -- Conclusion -- References -- PCA Plus LDA on Wavelet Co-occurrence Histogram Features: Application to CBIR -- Introduction -- Proposed Method. Image Representation Module -- Image Retrieval Module -- Experimental Results -- Conclusion -- References -- Printed Text Characterization for Identifying Print Technology Using Expectation Maximization Algorithm -- Introduction -- Related Work -- Expectation Maximization Technique -- Introduction -- Application of EM for Text Sample -- Algorithm for Characterization of Printed Text -- Classification of Printed Text -- Robustness of Printed Text Characterization -- Conclusion and Future Work -- References -- A Shape Representation Scheme for Hand-Drawn Symbol Recognition -- Introduction -- Notation and Definitions -- Moments and Zernike Moments -- The Proposed Shape Representation Scheme -- Experimental Study -- Conclusion -- References -- On Modeling the Affective Effect on Learning -- Introduction -- Architecture of the Multi Strategy Machine Learning System -- Application of the Ontology of Learning Strategies to the Generation of Student Models -- Enhancements to Handle Affective States -- Related Work -- Results -- References -- Machine Learning Based Performance Prediction for Multi-core Simulation -- Introduction -- Overview of the AKULA Toolset -- Improving Multi-core Simulation in AKULA -- Model Building -- Experimental Setup -- Experiments -- Solo-run Program Attributes and Class Variable -- Results on Prediction Accuracy of Model -- Transferability of Trained Regression Models -- Related Work -- Conclusion and Future Work -- References -- Forecasting Using Rules Extracted from Privacy Preservation Neural Network -- Introduction -- Overview of PSO, DENFIS and CART -- PSO -- DENFIS -- Classification and Regression Tree (CART) [22] -- Proposed Methodology -- Proposed Feature Selection Method -- Results and Discussion -- Conclusions -- References -- Typhon - A Mobile Agents Framework for Real World Emulation in Prolog -- Introduction. Typhon : The Mobile Agent Framework -- Overview -- Typhlets and Typhclones : Creation, Migration and Payloads -- Agent Creation -- Agent Migration -- Payloads -- Network Management -- Security -- Restore Points -- Implementation -- Conclusions -- References -- Optimal Service Composition via Agent-Based Quality of Service -- Introduction -- Related Work -- An Agent-Based Framework -- Architecture -- Optimal Composite Service as Quality of Service -- Communication Protocol -- Quality of Service -- Data Preparation -- Data Example -- Satisfaction-Cost Ratio as Quality of Service -- Computing Optimal Service Composition -- Experiments -- Results --

Conclusion -- References -- Enhanced Data Replication Broker -- Introduction -- Problem Statements -- Architecture of the Modified Data Replication Broker -- Replica Management System (RMS) -- Replica Optimization Service (ROS) -- Replica Optimization Service (ROS) -- Network Monitoring Service (NMS) -- Data Transport Service (DTS) -- Intelligent Optimizer -- Coarse-Grain Phase Using Efficient Replica Set Technique (EST) -- Fine-Grain Phase Using Minimum Cost and Time Policy (MCTP) -- Delay Function -- Network Efficacy -- Multiple Data Stream Function -- Simulation Inputs -- Performance Evaluation and Results -- References -- A Modified Harmony Search Threshold Accepting Hybrid Optimization Algorithm -- Introduction -- Literature Survey -- MHSTA Hybrid -- Overview of Harmony Search -- Threshold Accepting Algorithm -- MHSTA Algorithm -- Results and Discussions -- Conclusions -- References -- Differential Evolution Algorithm for Motion Estimation -- Introduction -- Differential Evolution Method -- Problem Formulation -- Experimental Results and Analysis -- Conclusions -- References -- Swarm Intelligence Based Localization in Wireless Sensor Networks -- Introduction -- Related Work.
Distance Measurement.

Sommario/riassunto

This volume constitutes the refereed proceedings of the 5th Multi-disciplinary International Workshop On Artificial Intelligence, MIWAI 2011, held in Hyderabad, India, in December 2011. The 38 revised full papers presented were carefully reviewed and selected from 71 submissions. The papers cover the multifarious nature of the Artificial Intelligence research domain, ranging from theoretical to real world applications and address topics such as agent-based simulation, agent-oriented software engineering, agents and Web services, agent-based electronic commerce, auctions and markets, AI in video games, computer vision, constraint satisfaction, data mining, decision theory, distributed AI, e-commerce and AI, game theory, internet/www intelligence, industrial applications of AI, intelligent tutoring, knowledge representation and reasoning, machine learning, multi-agent planning and learning, multi-agent systems and their applications, multi-agent systems and evolving intelligence, natural language processing, neural networks, planning and scheduling, robotics, uncertainty in AI, and Web services.
