1. Record Nr. UNINA9910484645403321

Titolo	Computational Collective Intelligence [[electronic resource]] : 9th International Conference, ICCCI 2017, Nicosia, Cyprus, September 27-29, 2017, Proceedings, Part I / / edited by Ngoc Thanh Nguyen, George A. Papadopoulos, Piotr Jdrzejowicz, Bogdan Trawiski, Gottfried Vossen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-67074-3
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXVIII, 592 p. 168 illus.)
Collana	Lecture Notes in Artificial Intelligence ; ; 10448
Disciplina	006.3
Soggetti	Artificial intelligence Application software Data mining Algorithms Computer organization Artificial Intelligence Information Systems Applications (incl. Internet) Data Mining and Knowledge Discovery Computer Appl. in Administrative Data Processing Algorithm Analysis and Problem Complexity Computer Systems Organization and Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents - Part I -- Contents - Part II -- Knowledge Engineering and Semantic Web -- Mapping the Territory for a Knowledge-Based System -- Abstract -- 1 Role of Metaphors and Visuals for Design Science and PKM -- 2 Employing Metaphors and Maps in Knowledge Management -- 3 A Knowledge Map Visualizing Knowledge in Space and Time -- 3.1 Foraging Loop: Knowledge Identification, Acquisition, and Preservation -- 3.2 Sensemaking Loop: Knowledge Goals, Development, Diffusion, Use -- 3.3 PKMS Support Functions: Knowledge Measurement and

Management -- 4 Conclusions and the Road Ahead -- References -- A Bidirectional-Based Spreading Activation Method for Human Diseases Relatedness Detection Using Disease Ontology -- 1 Introduction -- 2 Related Work -- 3 The Disease Ontology -- 4 Methodology -- 4.1 Semantic Matching -- 4.2 Disease Relatedness Detection -- 5 Workflow of the Proposed Method -- 6 Running Example -- 7 Conclusion and Future Work -- References -- Semantic Networks Modeling with Operand-Operator Structures in Association-Oriented Metamodel -- 1 Introduction -- 2 SKB Overview -- 3 Semantic Networks -- 3.1 Related Work -- 3.2 Key Features of ESNMSKB -- 4 Operand-Operator Constructions in ESNMSKB -- 4.1 Syntax and Semantics -- 4.2 Structure -- 4.3 Examples -- 5 Summary -- References -- Knowledge Integration in a Manufacturing Planning Module of a Cognitive Integrated Management Inform ... -- Abstract -- 1 Introduction -- 2 Related Works -- 3 Manufacturing Planning Module in CIMIS -- 4 Inconsistency of Knowledge in Manufacturing Plans -- 5 Consensus of Manufacturing Plans -- 6 Discussion and Experiment Results -- 7 Conclusions -- References -- The Knowledge Increase Estimation Framework for Ontology Integration on the Relation Level -- 1 Introduction -- 2 Related Works -- 3 Basic Notions.
4 The Quantity of Knowledge on the Relations' Level of Ontologies -- 4.1 Overview of Integration Algorithms -- 4.2 Algorithms for Knowledge Increase Estimation -- 5 Uses Case Scenarios for Hierarchy and Relation Integration -- 5.1 Hierarchy Integration -- 5.2 Integration of Concepts' Relations -- 6 Future Works and Summary -- References -- Particle Swarm of Agents for Heterogenous Knowledge Integration -- 1 Introduction -- 2 Related Works -- 3 Particle Swarm Model of an Agent System -- 3.1 Division of Collective -- 3.2 Leader Selection -- 3.3 Inter-group Interaction -- 3.4 Diffusion of Knowledge in Groups -- 3.5 Leader Knowledge Integration -- 4 Experimental Evaluation -- 5 Conclusions -- References -- Design Proposal of the Corporate Knowledge Management System -- Abstract -- 1 Introduction -- 2 Conceptual Foundation -- 3 The Core Management System -- 3.1 Core Functions -- 3.2 Main Segments of the System -- 3.3 Information Architecture -- 4 Collaborative Knowledge Building -- 4.1 Extended Functions -- 4.2 Process of Knowledge Building -- 5 Conclusions and Discussion -- Acknowledgement -- References -- Dipolar Data Integration Through Univariate, Binary Classifiers -- Abstract -- 1 Introduction -- 2 Partially Structured Learning Sets and Dipoles -- 3 Transformation of Learning Sets by Separable Layers of Univariate Binary Classifiers -- 4 Optimized Strategy of Separable Layer Designing from Univariate Binary Classifiers -- 5 Data Integration by Separable Layer of Univariate Binary Classifiers -- 6 Concluding Remarks -- Acknowledgments -- References -- Intelligent Collective: The Role of Diversity and Collective Cardinality -- Abstract -- 1 Introduction -- 2 Related Works -- 3 Intelligence of a Collective -- 4 Research Model -- 5 Experimental Results and Their Evaluation -- 5.1 Simulation Design.
5.2 The Impact of Diversity on the Intelligence of a Collective -- 5.3 Statistical Analysis -- 6 Conclusions and Future Works -- Acknowledgement -- References -- RuQAR: Querying OWL 2 RL Ontologies with Rule Engines and Relational Databases -- 1 Introduction and Motivation -- 2 Related Work -- 3 Ontology Translation Method -- 4 Mapping Ontology Predicates to Relational Data -- 5 Implementation and Experiments -- 6 Conclusions and Future Work -- References -- The Efficiency Analysis of the Multi-level Consensus Determination Method -- 1 Introduction -- 2 Related Works -- 3 Basic Notions -- 4 Multi-level Consesnsus Determination Approach -- 5 Experimental Evaluation of One- and Multi-level Binary

Vector Integration -- 6 Future Works and Summary -- References -- Collective Intelligence Supporting Trading Decisions on FOREX Market -- Abstract -- 1 Introduction -- 2 Architecture and Functionalities of A-Trader -- 3 Building Trading Strategies -- 4 Research Experiment -- 5 Conclusions -- References -- Social Networks and Recommender Systems -- Testing the Acceptability of Social Support Agents in Online Communities -- 1 Introduction -- 2 Background -- 2.1 Related Work -- 2.2 Requirements Analysis -- 3 Support Agent -- 4 Pilot Study -- 4.1 Participants -- 4.2 Agent Variants -- 4.3 Design -- 4.4 Task and Procedure -- 4.5 Variables -- 5 Results -- 6 Discussion -- References -- Enhancing New User Cold-Start Based on Decision Trees Active Learning by Using Past Warm-Users Predictions -- 1 Introduction -- 2 Related Work -- 3 Contribution -- 3.1 Apply Warm Predictions to Decision Trees Algorithms -- 3.2 Complexity of the algorithm -- 4 Experimentation -- 5 Conclusions and Future Work -- References -- An Efficient Parallel Method for Performing Concurrent Operations on Social Networks -- 1 Introduction -- 2 Problem Formulation and Related Works.
2.1 Data and Operation Model -- 2.2 Related Works -- 3 Method for Performing Concurrent Operations -- 3.1 Organizing the Data Structure -- 3.2 Optimizing the Updating Operations -- 3.3 Optimizing the Query Processing -- 4 Experiments and Evaluation -- 5 Conclusion and Future Works -- References -- Simulating Collective Evacuations with Social Elements -- Abstract -- 1 Introduction -- 2 Related Work -- 3 IMPACT Model -- 4 Simulation Results -- 5 Discussion -- References -- Social Networks Based Framework for Recommending Touristic Locations -- Abstract -- 1 Introduction -- 2 Related Work -- 3 Proposed Approach -- 3.1 Framework Design -- 3.2 Data Fetching -- 3.3 Data Analysis -- 3.4 Database Schema -- 3.5 Generate Recommendation -- 4 Prototyping -- 5 Evaluation -- 6 Conclusion and Perspectives -- References -- Social Network-Based Event Recommendation -- 1 Introduction -- 2 Related Works -- 3 The Event Recommendation Method -- 3.1 Detection Stage -- 3.2 Extraction Stage -- 3.3 Recommendation Score -- 4 Experiments -- 4.1 Datasets -- 4.2 Evaluation -- 4.3 Results and Discussions -- 5 Conclusion and Future Work -- References -- Deep Neural Networks for Matching Online Social Networking Profiles -- 1 Introduction -- 2 Related Work -- 2.1 Personal Web Pages Deduplication -- 2.2 Social Networking Profiles Matching -- 3 Proposed Approach -- 4 Dataset and Features -- 4.1 Profiles Dataset -- 4.2 Profiles Features -- 5 Experiments -- 5.1 Unsupervised Clustering for Profile Matching -- 5.2 Binary Classification for Profile Matching -- 6 Results -- 7 Conclusions -- References -- Effect of Network Topology on Neighbourhood-Aided Collective Learning -- 1 Introduction -- 2 Neighbourhood-Aided Collective Learning -- 3 Experimental Setting -- 4 Characterizing the Influence of the Network Topology on the Learning Speed -- 4.1 Main Factors -- 4.2 Secondary Factors.
5 Importance of Hypotheses and Examples Propagation -- 6 Conclusion -- References -- A Generic Approach to Evaluate the Success of Online Communities -- Abstract -- 1 Introduction -- 2 Literature Review -- 3 Evaluation -- 3.1 Determinants of Success in Online Communities -- 3.2 First Evaluation Level -- 3.3 Second Evaluation Level -- 4 Approach Application on a Social Network-Based Community -- 4.1 First Evaluation Level -- 4.2 Second Evaluation Level -- 5 Conclusion -- References -- Considerations in Analyzing Ecological Dependent Populations in a Changing Environment -- 1 Introduction -- 2 Problem Description -- 3 Proposed Approaches -- 3.1 Movement Behavior -- 3.2 Reproduction Behavior -- 3.3 Feeding

Behaviour -- 3.4 An Individual's Death -- 4 Visualising the Populations -- 5 Experimental Results and Statistical Tests -- 6 Conclusion and Future Work -- References -- Automatic Deduction of Learners' Profiling Rules Based on Behavioral Analysis -- Abstract -- 1 Introduction -- 2 Research Context and Related Works -- 3 Approach for an Automatic Deduction of Learner's Profiling Rules -- 3.1 The Collection Traces' Component -- 3.2 The Transformation of Log Files' Component -- 3.3 The Fusion of Log File and Learning Object's Metadata Component -- 3.4 The Extraction of Behavioral Indicators Component -- 3.5 Generation of Profiling Rules Component -- 3.6 Regulation of Learning Scenarios Component -- 4 Conclusions and Future Work -- References -- Predicting the Evolution of Scientific Output -- 1 Introduction -- 2 Taxonomy of Approaches -- 3 Challenges -- 4 Discussion and Future Research Directions -- References -- Data Mining Methods and Applications -- Enhanced Hybrid Component-Based Face Recognition -- 1 Introduction -- 2 Methods and Techniques -- 2.1 Preprocessing -- 2.2 Facial Components Detection -- 3 Face Recognition.
3.1 Representation of Features.

Sommario/riassunto

This two-volume set (LNAI 10448 and LNAI 10449) constitutes the refereed proceedings of the 9th International Conference on Collective Intelligence, ICCCI 2017, held in Nicosia, Cyprus, in September 2017. The 117 full papers presented were carefully reviewed and selected from 248 submissions. The conference focuseson the methodology and applications of computational collective intelligence, included: multi-agent systems, knowledge engineering and semantic web, social networks and recommender systems, text processing and information retrieval, data mining methods and applications, sensor networks and internet of things, decision support & control systems, and computer vision techniques. .