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| 1. Record Nr.           | UNINA9910484367403321  |
| Titolo                  | Progress in Artificial Intelligence : 17th Portuguese Conference on Artificial Intelligence, EPIA 2015, Coimbra, Portugal, September 8-11, 2015. Proceedings / / edited by Francisco Pereira, Penousal Machado, Ernesto Costa, Amílcar Cardoso   |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015  |
| ISBN                    | 3-319-23485-4  |
| Edizione                | [1st ed. 2015.]  |
| Descrizione fisica      | 1 online resource (XXVI, 811 p. 213 illus.)  |
| Collana                 | Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 9273   |
| Disciplina              | 006.3  |
| Soggetti                | Artificial intelligence<br>Application software<br>Computer simulation<br>Image processing - Digital techniques<br>Computer vision<br>Data mining<br>Database management<br>Artificial Intelligence<br>Computer and Information Systems Applications<br>Computer Modelling<br>Computer Imaging, Vision, Pattern Recognition and Graphics<br>Data Mining and Knowledge Discovery<br>Database Management   |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Bibliographic Level Mode of Issuance: Monograph  |
| Nota di contenuto       | Ambient Intelligence and Affective Environments -- Defining Agents' Behaviour for Negotiation Contexts -- Improving User Privacy and the Accuracy of User Identification in Behavioral Biometrics -- Including Emotion in Learning Process -- Ambient Intelligence: Experiments on Sustainability Awareness -- Artificial Intelligence in Medicine Reasoning with Uncertainty in Biomedical Models -- Smart environments and context-awareness for lifestyle management in a healthy active ageing |

framework -- Gradient: A User-Centric Lightweight Smartphone-Based Standalone Pervasive Fall Detection System -- Towards diet management with automatic reasoning and persuasive natural language generation -- Predicting within-24h visualization of hospital clinical reports using Bayesian networks -- On the Efficient Allocation of Diagnostic Activities in Modern Imaging Departments -- Ontology Based Information Gathering System for Patients with Chronic Diseases: Lifestyle Questionnaire Design -- Predicting Preterm Birth in Maternity Care by means of Data Mining -- Characterizing Barotrauma Patients in ICU { Clustering Data Mining using ventilator variables -- Clinical Decision Support for Active and Healthy Ageing: an intelligent monitoring approach of daily living activities -- Discovering Interesting Trends in Real Medical Data: A study in Diabetic Retinopathy -- Artificial Intelligence in Transportation Systems -- A Column Generation Based Heuristic for a Bus Driver Roistering Problem -- A Conceptual MAS Model for Real-time Traffic Control -- Prediction of Journey Destination in Urban Public Transport -- Demand Modelling for Responsive Transport Systems Using Digital Footprints -- Artificial Life and Evolutionary Algorithms -- A Case Study on the Scalability of Online Evolution of Robotic Controllers -- Spatial Complexity Measure for Characterising Cellular Automata Generated 2D Patterns -- Electricity Demand Modelling with Genetic Programming -- The Optimization Ability of Evolved Strategies -- Evolution of a Metaheuristic for Aggregating Wisdom from Artificial Crowds -- The influence of topology in coordinating collective decision-making in bio-hybrid societies -- A Differential Evolution Algorithm for Optimization Including Linear Equality Constraints -- Multiobjective Firefly Algorithm for Variable Selection in Multivariate Calibration -- Semantic Learning Machine: A Feed forward Neural Network Construction Algorithm Inspired by Geometric Semantic Genetic Programming -- Eager Random Search for Differential Evolution in Continuous Optimization -- Learning from Play: Facilitating character design through genetic programming and human mimicry -- Memetic Algorithm for Solving The 0-1 Multidimensional Knapsack Problem -- Synthesis of In-place Iterative Sorting Algorithms using GP: A Comparison Between STGP, SFGP, G3P and GE -- Computational Methods in Bioinformatics and Systems Biology Variable elimination approaches for data-noise reduction in 3D QSAR Calculations -- Pattern-based Biclustering with Constraints for Gene Expression Data Analysis -- A Critical Evaluation of Methods for the Reconstruction of Tissue-Specific Models -- Fuzzy Clustering for Incomplete Short Time Series Data -- General Artificial Intelligence -- Allowing Cyclic Dependencies in Modular Logic Programming -- Probabilistic Constraint Programming for Parameters Optimisation of Generative Models -- Reasoning over Ontologies and Non-monotonic Rules -- On the cognitive surprise in risk management: an analysis of the Value-at-Risk (VaR) historical -- Logic Programming Applied to Machine Ethics -- Intelligent Information Systems -- Are Collaborative Filtering Methods Suitable for Student Performance Prediction? -- Intelligent Robotics -- A New Approach for Dynamic Strategic Positioning in RoboCup Middle-Size League -- Intelligent Wheelchair Driving: Bridging the Gap between Virtual and Real Intelligent Wheelchairs -- A Skill-based Architecture for Pick & Place Manipulation Tasks -- Adaptive Behavior of a Biped Robot using Dynamic Movement Primitives -- Probabilistic Constraints for Robot Localization -- Detecting Motion Patterns in Dense Flow Fields: Euclidean versus Polar Space -- Swarm Robotics Obstacle Avoidance: A Progressive Minimal Criteria Novelty Search-based Approach -- Knowledge Discovery and Business

Intelligence -- An Experimental Study on Predictive Models using Hierarchical Time Series -- Crime prediction using regression and resources optimization -- Distance-based decision tree algorithms for Label Ranking -- A Proactive Intelligent Decision Support System for Predicting the Popularity of Online News -- Periodic Episode Discovery over Event Streams -- Forecasting the Correct Trading Actions -- CTCHAID: extending the application of the consolidation methodology -- Towards Interactive Visualization of Time Series Data to Support Knowledge Discovery -- Ramex-Forum: Sequential Patterns of Prices in the Petroleum Production Chain -- Geocoding Textual Documents Through a Hierarchy of Linear Classifiers -- A Domain-Specific Language for ETL Patterns Specification in Data -- Warehousing Systems -- Optimized Multi-Resolution Indexing and Retrieval Scheme of Time Series -- Multi-Agent Systems: Theory and Applications -- Minimal Change in Evolving Multi-Context Systems -- Bringing Constitutive Dynamics to Situated Artificial Institutions -- Checking WECTLK Properties of Timed Real-Weighted Interpreted Systems via SMT-based Bounded Model Checking -- SMT-based Bounded Model Checking for Weighted Epistemic ECTL -- Dynamic Selection of Learning Objects Based on SCORM Communication -- Sound visualization through a swarm of fireflies -- Ana Rodrigues, Amlcar Cardoso, Penousal Machado and Pedro Martins Social Simulation and Modelling -- Analysing the Influence of the Cultural Aspect in the Self-regulation of Social Exchanges in MAS Societies: an evolutionary game-based approach -- Modelling Agents' Perception: Issues & Challenges in Multi-Agents Based Systems -- Agent-Based Modelling for a resource management problem in a Role-Playing Game -- An Agent-Based MicMac model for forecasting of the Portuguese Population -- Text Mining and Applications -- Multilingual Open Information Extraction -- Classification and Selection of Translation Candidates for Parallel corpora Alignment -- A SMS Information Extraction Architecture to Face Emergency Situations -- Cross-lingual Word Sense Clustering for Sense Disambiguation -- Towards the Improvement of a Topic Model with Semantic Knowledge -- RAPPORT { A Portuguese Question-Answering System -- Automatic Distinction of Fernando Pessoa's Heteronyms -- Social Impact - identifying quotes of literary works in social networks -- Fractal Beauty in Text -- How does irony affect Sentiment Analysis Tools?.

## Sommario/riassunto

This book constitutes the refereed proceedings of the 17th Portuguese Conference on Artificial Intelligence, EPIA 2015, held in Coimbra, Portugal, in September 2015. The 45 revised full papers presented together with 36 revised short papers were carefully reviewed and selected from a total of 131 submissions. EPIA 2015, following the standard EPIA format, covers a wide range of AI topics as follows: ambient intelligence and affective environments, artificial Intelligence in medicine, artificial intelligence in transportation systems, artificial life and evolutionary algorithms, computational methods in bioinformatics and systems biology, general artificial intelligence, intelligent information systems, intelligent robotics, knowledge discovery and business intelligence, multi-agent systems: theory and applications, social simulation and modelling, text mining and applications.