

Accepted Papers

203 submissions, 25% (Springer Proceedings), 34% (APPIA Proceedings)

* (star mark) following the paper's title means: "accepted for Springer volume publication".

Affective Computing

Sentiment Analysis of News Titles: The Role of Entities and a New Affective Lexicon *
Daniel Loureiro and Goreti Marreiros

Empathic Virtual Buddy: Setting Up Informed Empathic Responses
Janneke Van Der Zwaan, Virginia Dignum, Joost Broekens and Catholijn Jonker

A Theory to Measure Participant Satisfaction in a Meeting Supported by a GDSS
João Cameiro, Ricardo Santos, Goreti Marreiros and João Laranjeira

Ambient Intelligence Environments

Developing Dynamic Conflict Resolution Models Based on the Interpretation of Personal Conflict Styles *
Davide Carneiro, Marco Gomes, Paulo Novais and Jose Neves

Modeling context-awareness in agents for Ambient Intelligence: an aspect-oriented approach *
Inmaculada Ayala, Mercedes Amor Pinilla and Lidia Fuentes

Providing Location Everywhere *
Ricardo Anacleto, Lino Figueiredo, Paulo Novais and Ana Almeida

Organizations of Agents in Information Fusion Environments *
Dante I. Tapia, Fernando De La Prieta, Sara Rodríguez González, Javier Bajo and Juan M. Corchado

Weight factor algorithms for activity recognition in lattice based sensor fusion
Jing Liao, Yaxin Bi and Chris Nugent

Automatic Attention Estimation in an Interactive System based on Behaviour Analysis
Benedikt Gollan, Bernhard Wally and Alois Ferscha

Using Multi-Layer Perceptrons to Enhance the Performance of Indoor RTLS
Dante Tapia, Javier Bajo, Juan Francisco De Paz Santana, Ricardo S Alonso and Juan M. Corchado

Loosely Coupling between Service and Context in Ambient Computing Environments
Ichiro Satoh

Artificial Intelligence Methodologies for Games

Wasp-like Agents for Scheduling Production in Real-time Strategy Games *
Marco Santos and Carlos Martinho

Identifying Player's Strategies in No Limit Texas Hold'em Poker through the Analysis of Individual Moves
Luís Filipe Teófilo and Luis Paulo Reis

Development of a Generic Interface System for Developing Abstract Board Games
Ivo Paz Reis and Luis Paulo Reis

Artificial Intelligence in Transportation Systems

Operational Problems Recovery in Airlines – A Specialized Methodologies Approach *
Bruno Aguiar, José Torres and António J. M. Castro

Solving Heterogeneous Fleet Multiple Depot Vehicle Scheduling Problem as an Asymmetric Traveling Salesman Problem *
Jorge A. Ramos, Luis Paulo Reis and Dulce Pedrosa

Finding interesting contexts for explaining deviations in trip duration



Planning and scheduling problems for trip planning applications
Alipio M. Jorge, João Mendes-Moreira, Jorge Freire Sousa, Paulo Jorge Azevedo and Carlos Soares

Multiobjective route planning with precalculated heuristics
Enrique Machuca and Lawrence Mandow

Real-Time Incidents Detection in the Highways of the Future
Antonio Pecharrmán, Nuria Sánchez, Juan Torres and José Manuel Menéndez

A negotiation based approach to Airlines Operations recovery
António J. M. Castro, António Pereira, Leonardo Fraga, Ana Paula Rocha and Eugénio Oliveira

Artificial Life and Evolutionary Algorithms

Network Regularity and the Influence of Asynchronism on the Evolution of Cooperation *
Carlos Grilo and Luís Correia

Evolving Numerical Constants in Grammatical Evolution with the Ephemeral Constant Method *
Douglas Augusto, Helio Barbosa, André Barreto and Heder Bernardino

Evolving Reaction-Diffusion Systems on GPU *
Lidia Yamamoto, Wolfgang Banzhaf and Pierre Collet

Towards Artificial Evolution of Complex Behavior Observed in Insect Colonies *
Miguel Duarte, Anders Christensen and Sancho Oliveira

The Squares Problem and a Neutrality Analysis with ReNCoDe *
Rui Lopes and Ernesto Costa

A Method to Reuse Old Populations in Genetic Algorithms *
Mauro Castelli, Luca Manzoni and Leonardo Vanneschi

Particle Swarm Optimization for Gantry Control: A Teaching Experiment *
Paulo Moura Oliveira, Eduardo Solteiro Pires and José Boaventura Cunha

The evolution of foraging in an open-ended simulation environment *
Tiago Baptista and Ernesto Costa

Experiments on Controlling Overfitting in Genetic Programming
Ivo Gonçalves and Sara Silva

Reinsertion of Old Genetic Material: Second Chance GP
Mauro Castelli, Luca Manzoni and Leonardo Vanneschi

A Multi-path Planning Approach Based on a Genetic Algorithm for a Robot Fleet Working in Arable Crops
Jesus Conesa, Angela Ribeiro and Gonzalo Pajares

PSO Tuned PI/PID Controller for Open-Loop Unstable Processes with Time Delay
Nelendran Pillay and Poobalan Govender

Partner classification in partner selection
Pedro Mariano and Luís Correia

Multi-cast Ant Colony Optimization Algorithms
Leonor Melo, Francisco Pereira and Ernesto Costa

Noise and Intermediate Asynchronism in Cellular Automata with Sampling Compensation
Fernando Silva and Luís Correia

Towards a Multiobjective Evolutionary Approach to Inventory and Routing Management in a Retail Chain
Anna I Esparcia Alcazar, Jj Merelo, Pablo Garcia-Sanchez and Ana Isabel Martinez Garcia

Computational Logic with Applications

Optimal Division of Execution Trees *
David Insa and Josep Silva

A Subterm-Based Global Trie for Tabled Evaluation of Logic Programs *
João Raimundo and Ricardo Rocha

Data acquisition and modeling for learning and reasoning in probabilistic logic environment
Dimitar Shterionov and Gerda Janssens

Proximity-based Unification
Pascual Julián-Iranzo and Clemente Rubio-Manzano

A Simple Table Space Design for Retroactive Call Subsumption
Flavio Cruz and Ricardo Rocha

On the Semantics of Heterogeneous Querying of Relational, XML, and RDF data with XSPARQL
Nuno Lopes, Stefan Bischof and Axel Polleres

Every normal logic program has a 2-valued Minimal Hypotheses semantics
Alexandre Miguel Pinto and Luís Moniz Pereira

From Proof Trees to Justificatory Answering
Newton José Vieira, Isabel Gomes Barbosa and Carlos Camarão Figueiredo

General Artificial Intelligence

Unsupervised Music Genre Classification with a Model-Based Approach *
Luís Barreira, Sofia Cavaco and Joaquim Silva

A Simulated Annealing Algorithm for the Problem of Minimal Addition Chains *
Adan Jose-Garcia, Hillel Romero-Monsivais, Cindy Hernandez, Arturo Rodriguez-Cristerna, Ivan Rivera-Isilas and Jose Torres-Jimez

Constrained Sequential Pattern Knowledge in Multi-Relational Learning *
Carlos Ferreira, João Gama and Vítor Costa

Intention-based Decision Making with Evolution Prospecction *
Anh Han The and Luís Moniz Pereira

Novelty Detection Using Graphical Models for Semantic Room Classification *
André Susano Pinto, Andrzej Pronobis and Luís Paulo Reis

Summarizing Frequent Itemsets via Pignistic Transformation *
Francisco Guil-Reyes and Maria-Teresa Daza-Gonzalez
A Belief Function Model for Ascribing Causality
Imen Boukhris, Salem Benferhat and Zied Elouedi

Covering Arrays Construction Using OSCAR
Oscar Alejandro Carrizales-Turrubiates, Nelson Rangel-Valdez and Jose Torres-Jimenez

Using Ontologies to Abstract Relational Databases Conceptual Model
Ricardo André Pereira Freitas and José Carlos Ramalho

Using CBR for Portuguese Automatic Question Generation
Daniel Diéguez Arias, Ricardo Rodrigues and Paulo Gomes

Intelligent Robotics

Market-Based Dynamic Task Allocation using Heuristically Accelerated Reinforcement Learning *
José Angelo Gurzoni Junior, Flavio Tonidandel and Reinaldo A. C. Bianchi

Shop Floor Scheduling In a Mobile Robotic Environment *
Andry Pinto, Luís Rocha, António Paulo Moreira and Paulo Costa

Humanized Robot Dancing: Humanoid Motion Retargeting based in a Metrical Representation of Human Dance Styles *
Paulo Sousa, João L. Oliveira and Luís Paulo Reis

A Reinforcement Learning Based Method for Optimizing the Process of Decision Making in Fire Brigade Agents *
Abbas Abdolmaleki, Mostafa Movahedi, Sajjad Salehi, Nuno Lau and Luis Paulo Reis

Humanoid Behaviors: From Simulation to a Real Robot *
Edgar Domingues, Nuno Lau, Bruno Pimentel, Nima Shafii, Luis Paulo Reis and António J. R. Neves

Localization of an NXT Lego Robot via infra-red beacons
Heber Sobreira, Filipe Santos, Hugo Alves and António Paulo Moreira

Integrated Exploration of an Indoor Environment with SLAM Technique
Adão De Melo Neto, Paulo Fernando Ferreira Rosa and Paulo César Pellanda

Indoor Robot Localization and Navigation Using a Depth Camera
João Cunha, Eurico Pedrosa, Cristóvão Cruz, António J. R. Neves and Nuno Lau

Generic Optimization of Humanoid Robots' Behaviours
Luís Cruz and Luís Paulo Reis

Fuzzy Visual Servo Control applied to Autonomous Driving
Paulo Goncalves, Paulo Lopes, Pedro Torres and José Sequeira
Autonomous calibration for the kicking device of a soccer robot
Ricardo Dias, António J. R. Neves and José Luis Azevedo

Knowledge Discovery and Business Intelligence

Bankruptcy Trajectory Analysis on French Companies using Self-Organizing Map *
Ning Chen, Bernardete Ribeiro and Armando Vieira

Learning to rank for expert search in digital libraries of academic publications *
Catarina Moreira, Pável Calado and Bruno Martins

Network node label acquisition and tracking *
Sarvenaz Choobdar, Fernando Silva and Pedro Ribeiro

Automatically Enriching a Thesaurus with Information from Dictionaries *
Hugo Gonçalo Oliveira and Paulo Gomes

Visualizing the Evolution of Social Networks *
Márcia Oliveira and João Gama

Using Data Mining Techniques to Predict Deformability Properties of Jet Grouting Laboratory Formulations over Time *
Joaquim Tinoco, Antonio Gomes Correia and Paulo Cortez

Thematic Fuzzy Clusters with an Additive Spectral Approach *
Susana Nascimento, Rui Felizardo and Boris Mirkin

A New Algorithm for Learning Planning Operators from Unlabelled Execution Traces
Hugo Ferreira, Rui Carlos Camacho De Sousa Ferreira Da Silva and João José Da Cunha E Silva Pinto Ferreira

WiMAX traffic analysis and Base stations classification in terms of LRD
Cristina Stolojescu, Sorin Moga, Philippe Lenca and Alexander Isar

Logical Analysis of Inconsistent Data (LAID) for a Paremiologic Study
Luís Cavique, Armando B. Mendes and Matthias Funk

Clustering Stock Market values with a Self-Organized feature Map
Nuno C. Marques and Bruno Silva

A stock market crash alarm system based on an Hurst Index Neural Network
Nuno C. Marques and Alexandre Raposo

Success Factors for Integration of Data Mining In Organizations
Uroš Bole

Attribute Selection in Hedonic Pricing Modeling applied to the Portuguese Urban Housing Market
Paulo Batista, Gladys Castillo, João Marques and Eduardo Castro

Inducting business users of business intelligence systems into data mining models
Ana Azevedo and Manuel Santos

Multi-Agent Systems: Theory and Applications

Doubtful Deviations and Farsighted Play *
Wojtek Jamroga and Matthijs Melissen

Dynamic Agents' Behavior for Computational Trust Models *
Maria Joana Urbano, Ana Rocha and Eugénio Oliveira

Uncertainty and Novelty-based Selective Attention in the Collaborative Exploration of Unknown Environments *
Luís Macedo, Miguel Tavares, Pedro Gaspar and Amílcar Cardoso

The BMC method for the existential part of RTCTLK and interleaved interpreted systems *
Bożena Wozna-Szczesniak, Andrzej Zbrzezny and Agnieszka Zbrzezny

An Agent Decision Model for the Anytime Supervision of Distributed Systems
Cédric Herpson, Amal El Fallah Seghrouchni and Vincent Corruble

Meta-axioms and Complex Preferences in Evolving Logical Agents
Stefania Costantini, Pierangelo Dell'Acqua, Luis Moniz Pereira and Francesca Toni

Multi-Agent System for Credit Scoring
Fabio Silva and Cesar Analide

Programming Aml Applications: Mapping Hierarchies of Agents to Context Structure
Andrei Olaru, Amal El Fallah Seghrouchni and Adina Magda Florea

Applying a UML Metamodel to the Requirements Modeling in Multi-Agents Systems Projects
Gilleanes Guedes

Social Simulation and Modeling

Building Spatiotemporal Emotional Maps for Social Systems *
Pedro Catré, Luís Cardoso, Luís Macedo and Amílcar Cardoso

Modeling and Simulation of Firms' Growth in Business Markets using the Moran Process
Cláudia Moreiras, Cristina Matias and Pedro Campos

Imitation based Multi Agent System
Sorin Moga and Hervé Le Guen

Social Learning and Power Broker Dynamics in Societies in Conflict
Seyed Mussavi Rizi, Armando Geller and Maciej Latek

Text Mining and Applications

A bootstrapping approach for training a NER with Conditional Random Fields *
Jorge Teixeira, Luís Sermento and Eugénio Oliveira

Using the Web to Validate Lexico-Semantic Relations *
Hernani Costa, Hugo Gonçalo Oliveira and Paulo Gomes

Measuring Spelling Similarity for Cognate Identification *
Luis Gomes and José Gabriel Pereira Lopes

Identifying automatic posting systems in microblogs *
Gustavo Laboreiro, Luis Sarmiento and Eugénio Oliveira

Determining the Polarity of Words through an Common Online Dictionary *
António Paulo-Santos, Nuno C. Marques and Carlos Ramos

An unsupervised method for Named Entity Extraction and Classification *
Pablo Gamallo and Marcos Garcia

An Exploratory Study on how Temporal Features Impact the Classification and Clustering of Future-Related Web Documents *
Ricardo Campos, Gaël Dias and Alípio Jorge

Text Categorization: An extensive comparison of classifiers, feature selection metrics and document representation
Filipa Peleja, Gabriel Lopes and Joaquim Silva

Domain Independent Product Attribute Extraction from Reviews using Wikipedia
Sudheer Kovelamudi, Sethu Ramalingam and Vasudeva Varma

Managing and Querying a Bilingual Lexicon with Suffix Trees
Jorge Costa, Luís Gomes, Gabriel Lopes and Luis M. S. Russo

Using SVMs for Filtering Translation Tables for PBSMT
Kavitha Mahesh, Luís Gomes and José Gabriel Pereira Lopes

Extracting Lexical-Semantic Knowledge from the Portuguese Wiktionary
Leticia Antón Pérez, Hugo Gonçalo Oliveira and Paulo Gomes

Extracting Biographical Sentences from Textual Documents
Sérgio Soares, Bruno Martins and Pavel Calado

CABLE - Correlated Approach on BiLingual Evaluation
Pedro Correia, António Leitão, Luís Macedo and Amílcar Cardoso

A Machine Learning Method for Resolving Temporal References in Text
Vitor Loureiro, Bruno Martins and Pável Calado

Ontology Driven Knowledge Extraction System with Application in e-Government
Mário Rodrigues, Gonçalo Paiva Dias and António Teixeira

Extracting Multiword Expressions using Noun Phrase Enumerations in Specialized Domains: first experiences
Merley Da Silva Conrado and Walter Koza

Text classification using Semantic Information and Graph Kernels
Miguel Gaspar, Teresa Gonçalves and Paulo Quaresma

Ontologising Relational Triples into a Portuguese Thesaurus
Hugo Gonçalo Oliveira and Paulo Gomes

Named Entity Recognition using Machine Learning techniques
Nuno Miranda, Ricardo Raminhos, Pedro Seabra, João Sequeira, Teresa Gonçalves and Paulo Quaresma

A minimally supervised approach for question generation: what can we learn from a single seed?
Sérgio Curto, Ana Cristina Mendes and Luísa Coheur

Doctoral Symposium on Artificial Intelligence

Transactions, Web and Logic *
Ana Sofia Gomes

Domain-Splitting Generalized Nogoods from Restarts *
Luís Baptista and Francisco Azevedo

Studying Researcher Communities using Text Mining on Online Bibliographic Databases
Luís Trigo

Arguing over Evidences for Establishing Contracts
Pedro Brandão Neto, Ana Paula Rocha and Henrique Lopes Cardoso

Software Image for Learning by Observation
Paulo R. A. M. Costa and Luis Miguel Botelho

The Role of Surprise in Agent-based Computational Economics (ACE)
Davi Baccan and Luís Macedo

Important Dates

[10.MAY.2011](#) • Paper submission.

[10.MAY.2011](#) • Abstract submission.

[17.MAY.2011](#) • Full Paper submission.

[10.JUN.2011](#) • Acceptance notification.

[01.JUL.2011](#) • Camera-ready papers.

[06.JUL.2011](#) • Camera-ready papers.

[01.JUL.2011](#) • Early registration deadline.

[15.JUL.2011](#) • Early registration deadline.

[10-13.OCT.2011](#) • Conference.

News

[16.MAR.2011](#) • Website Release.

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