2017 IEEE 29th International Conference on Tools with Artificial Intelligence (ICTAI 2017)

Boston, Massachusetts, USA 6-8 November 2017

Pages 1-662



IEEE Catalog Number: ISBN: CFP17091-POD 978-1-5386-3877-4

Copyright © 2017 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	
ISBN (Print-On-Demand):	
ISBN (Online):	
ISSN:	

CFP17091-POD 978-1-5386-3877-4 978-1-5386-3876-7 1082-3409

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400 Fax: (845) 758-2633 E-mail: curran@proceedings.com Web: www.proceedings.com



2017 International Conference on Tools with Artificial Intelligence ICTAI 2017

Table of Contents

Message from General Chair .xxy
Message from Program Chair .xxvi
Message from Special Track SAT/CSP Co-Chairs xxviii
Conference Organization xxix
Program Committee xxxi
Special Track Committee xxxiv
Sub-Reviewers xxxy

1.1 LEARNING I

A Concept Filtering Approach for Diverse Density to Discover Subgoals in Reinforcement Learning .1 Alper Demir (Middle East Technical University), Erkin Çilden (STM Defense TechnologiesEngineering and Trade Inc.), and Faruk Polat (Middle East Technical University)
Self-Paced Learning Based Multi-view Spectral Clustering .6 Hong Yu (Dalian University of Technology), Yahong Lian (Dalian University of Technology), Linlin Zong (Dalian University of Technology), and Linlin Tian (Dalian University of Technology)
Identifying Discriminative Attributes to Gain Insights Regarding Child Obesity in Hispanic Preschoolers Using Machine Learning Techniques .1.1 Paul Wiechmann (University of Central Oklahoma), Karina Lora (University of Connecticut Health), Paul Branscum (Miami University), and Jicheng Fu (University of Central Oklahoma)
Optimal Value of Information in Dynamic Bayesian Networks .16 Sarthak Ghosh (Stony Brook University) and C. R. Ramakrishnan (Stony Brook University)
Automatic Fish Classification System Using Deep Learning .24 Guang Chen (University of Missouri), Peng Sun (University of Missouri), and Yi Shang (University of Missouri)
AEDR: An Adaptive Mechanism to Achieve Online Learning Rate Dynamically .30 Jinjing Zhang (School of Computer and Information Science), Fei Hu (School of Computer and Information Science), Li Li (School of Computer and Information Science), Xiaofei Xu (School of Computer and Information Science), and Zhanbo Yang (School of Computer and Information Science)

An Effective Deep Learning Approach for Unobtrusive Sleep Stage Detection Using Microphone Sensor .37..... Yuxin Zhang (Research Center for Ubiquitous Computing Systems), Yiqiang Chen (Research Center for Ubiquitous Computing Systems), Lisha Hu (Research Center for Ubiquitous Computing Systems), Xinlong Jiang (Research Center for Ubiquitous Computing Systems), and Jianfei Shen (Research Center for Ubiquitous Computing Systems)

1.2 NEURAL MODELS I

Convolutional Neural Networks over Control Flow Graphs for Software Defect Prediction .45 Anh Viet Phan (Japan Advanced Institute of Science and Technology), Minh Le Nguyen (Japan Advanced Institute of Science and Technology), and Lam Thu Bui (Le Quy Don Technical University)
Recognition of Mammal Genera on Camera-Trap Images Using Multi-layer Robust Principal Component Analysis and Mixture Neural Networks .53 Jhony-Heriberto Giraldo-Zuluaga (Universidad de Antioquia), Augusto Salazar (Universidad de Antioquia), Alexander Gomez (Scuola universitaria professionale della Svizzera italiana), and Angélica Diaz-Pulido (Instituto de Investigación de Recursos Biológicos Alexander von Humboldt)
Asymmetric Ternary Networks .61 Jie Ding (University of Science and Technology of China), JunMin Wu (University of Science and Technology of China), and Huan Wu (University of Science and Technology of China)
A New Deep Neighbor Residual Network for Protein Secondary Structure Prediction .66 Chao Fang (University of Missouri - Columbia), Yi Shang (University of Missouri - Columbia), and Dong Xu (University of Missouri - Columbia and Bond Life Sciences Center)
SDF-NN: A Deep Neural Network with Semantic Dropping and Fusion for Natural Language Inference .72 Ludan Tan (National Laboratory for Parallel and Distributed Processing), Changjian Wang (National Laboratory for Parallel and Distributed Processing), Qin Lv (Department of Computer Science University of Colorado Boulder), Yuxing Peng (National Laboratory for Parallel and Distributed Processing), Minghao Hu (National Laboratory for Parallel and Distributed Processing), Xiang Zhao (National Laboratory for Parallel and Distributed Processing), and Zhen Huang (National Laboratory for Parallel and Distributed Processing)
PeMapNet: Action Recognition from Depth Videos Using Pyramid Energy Maps on Neural Networks .80 Jiahao Li (Department of Computer Science), Hejun Wu (Department of Computer Science), and Xinrui Zhou (Department of Computer Science)
Time-Frequency Convolutional Neural Network for Automatic Sleep Stage Classification Based on Single-Channel EEG .88 Liangjie Wei (Beijing Key Lab of Traffic Data Analysis and Mining), Youfang Lin (Beijing Key Lab of Traffic Data Analysis and Mining), Jing Wang (Beijing Key Lab of Traffic Data Analysis and Mining), and Yan Ma (Division of Interdisciplinary Medicine and Biotechnology)

1.3 AI LOGIC AND CONSTRAINTS I

A Distributed Logical Filter for Connected Row Convex Constraints .96 T. K. Satish Kumar (Information Sciences Institute), Hong Xu (Information Sciences Institute), Zheng Tang (Information Sciences Institute), Anoop Kumar (Information Sciences Institute), Craig Milo Rogers (Information Sciences Institute), and Craig A. Knoblock (Information Sciences Institute)
Automatic Generation of Descriptions of Time-Series Constraints .102 María Andreína Francisco Rodríguez (Uppsala University), Pierre Flener (Uppsala University), and Justin Pearson (Uppsala University)
A Lazy Algorithm to Efficiently Approximate Singleton Path Consistency for Qualitative Constraint Networks .1.10 Michael Sioutis (örebro University), Anastasia Paparrizou (Artois University), and Jean-François Condotta (Artois University)
Efficient Reification of Table Constraints .1.18 Minh Thanh Khong (Université catholique de Louvain), Yves Deville (Université catholique de Louvain), Pierre Schaus (Université catholique de Louvain), and Christophe Lecoutre (CRIL)
On Constraint Linear Decompositions Using Mathematical Variables .123 <i>Thierry Petit (IMT Atlantique)</i>
Finding Graph Decompositions via SAT .131. Wenting Zhao (Illinois Wesleyan University), Mark Liffiton (Illinois Wesleyan University), Peter Jeavons (University of Oxford), and Dan Roberts (Illinois Wesleyan University)
 Hard Neighboring Variables Based Configuration Checking in Stochastic Local Search for Weighted Partial Maximum Satisfiability .139 Yi Chu (Institute of Computing Technology), Chuan Luo (Institute of Computing Technology), Wenxuan Huang (Department of Material Science and Engineering), Haihang You (Institute of Computing Technology), and Dongrui Fan (Institute of Computing Technology)

1.4 LEARNING II

Using Transitional Bottlenecks to Improve Learning in Nearest Sequence Memory Algorithm .147 Hüseyin Aydn (Middle East Technical University), Erkin Çilden (STM Defense Technologies Engineering and Trade Inc.), and Faruk Polat (Middle East Technical University)
Two-Stage Feature Selection with Unsupervised Second Stage .153 Ke Xu (The University of Texas at Dallas), Hiromasa Arai (The University of Texas at Dallas), Crystal Maung (The University of Texas at Dallas), and Haim Schweitzer (The University of Texas at Dallas)
Using Deep Learning for Community Discovery in Social Networks .160 Di Jin (School of Computer Science and Technology), Meng Ge (School of Computer Science and Technology), Zhixuan Li (School of Computer Science and Technology), Wenhuan Lu (School of Computer Software), Dongxiao He (School of Computer Science and Technology), and Francoise Fogelman-Soulie (School of Computer Software)

Multi-label Learning by Exploiting Label Correlations with LDA .168
Yue Peng (Department of Computer Science and Technology), Gang Chen
(Department of Computer Science and Technology), Ming Xu (Department
of Computer Science and Technology), Chongjun Wang (Department of
Computer Science and Technology), and Junyuan Xie (Department of
Computer Science and Technology)
Improving Credit Risk Prediction in Online Peer-to-Peer (P2P) Lending Using Imbalanced Learning
Techniques .1.75
Luis Eduardo Boiko Ferreira (Pontifícia Universidade Católica do
Paraná), Jean Paul Barddal (Pontifícia Universidade Católica do
Paraná), Heitor Murilo Gomes (Université Paris-Saclay), and Fabrício
Enembreck (Pontifícia Universidade Católica do Paraná)
Machine Learning Approach for Infant Cry Interpretation .182
Aomar Osmani (Laboratoire LIPN-UMR CNRS 7030 PRES Sorbonne Paris
Cité), Massinissa Hamidi (Laboratoire LIPN-UMR CNRS 7030 PRES Sorbonne
Paris Cité), and Abdelghani Chibani (Laboratoire LISSI Université
Paris-Est Créteil)
Evaluation of Transfer Learning Algorithms Using Different Base Learners .187
Karl Weiss (Florida Atlantic University) and Taghi Khoshgoftaar
(Florida Atlantic University)

1.5 PREDICTION RECOMMENDATION METHODS

Exploiting Opinion Influence in Question Answering Systems .197 Dumitru-Clementin Cercel (Faculty of Automatic Control and Computers), Cristian Onose (Faculty of Automatic Control and Computers), Trausan-Matu Stefan (Faculty of Automatic Control and Computers), and Florin Pop (Faculty of Automatic Control and Computers)
Optimize Pricing Policy in Evolutionary Market with Multiple Proactive Competing Cloud Providers .202 Bing Shi (Wuhan University of Technology), Hangxing Zhu (Wuhan University of Technology), Jinwen Wang (Wuhan University of Technology), and Bin Sun (Wuhan University of Technology)
 Heterogeneous Ensemble Dynamic Selection for Software Development Effort Estimation .2.10 Jose Thiago H. de A. Cabral (Centro de Informatica), Ricardo de A. Araujo (Laboratorio de Inteligencia Computacional do Araripe), Jarley P. Nobrega (Centro de Tecnologias Estrategicas do Nordeste), and Adriano L. I. Oliveira (Centro de Informatica)
User Interest Propagation and Its Application in Recommender System .218 Xue Li (State Key Laboratory of Software Development Environment), Richong Zhang (State Key Laboratory of Software Development Environment), and Jianxin Li (State Key Laboratory of Software Development Environment)
 When Deep Neural Networks Meet Job Offers Recommendation .223 Sidahmed Benabderrahmane (Paris Dauphine University), Nedra Mellouli (Paris 8 University), Myriam Lamolle (Paris 8 University), and Nada Mimouni (Paris Dauphine University)

Massive Open Online Courses Temporal Profiling for Dropout Prediction .231
Tom Rolandus Hagedoorn (Department of Data Science and Knowledge
Engineering) and Gerasimos Spanakis (Department of Data Science and
Knowledge Engineering)
Time Series Forecasting in the Presence of Concept Drift: A PSO-based Approach .239
Gustavo H. F. M. Oliveira (Centro de Informatica), Rodolfo C.
Cavalcante (Nucleo de Ciencias Exatas), George G. Cabral (Statistics
and Informatics Department), Leandro L. Minku (Department of
Informatics), and Adriano L. I. Oliveira (Centro de Informatica)

1.6 DOCUMENT PROCESSING

Converting Diagrams, Formulas, Tables, Graphics and Pictures into SPN and NL-text Sentences for Automatic Deep Understanding of Technical Documents .247. Nikolaos Bourbakis (Wright State University)
An Improved LDA Multi-document Summarization Model Based on TensorFlow .255 Ying Zhong (College of Information Science and Engineering), Zhuo Tang (College of Information Science and Engineering), Xiaofei Ding (College of Information Science and Engineering), Li Zhu (College of Information Science and Engineering), Yuquan Le (College of Information Science and Engineering), Kenli Li (College of Information Science and Engineering), Kenli Li (College of Information Science and Engineering), and Keqin Li (Department of Computer Science State University of New York)
Using Semantic Relations between Keywords to Categorize Articles from Scientific Literature .260 Bastien Latard (MIPS), Jonathan Weber (MIPS), Germain Forestier (MIPS), and Michel Hassenforder (MIPS)
Efficient Topic Modeling on Phrases via Sparsity .265 Weijing Huang (Peking University), Wei Chen (Peking University), Tengjiao Wang (Peking University), and Shibo Tao (Peking University)
A Regression-Based Approach Using Integer Linear Programming for Single-Document Summarization .2.70 Hilário Oliveira (Informatics Center - UFPE), Rafael Dueire Lins (Informatics Center - UFPE), Rinaldo Lima (Informatics Center - UFPE), and Fred Freitas (Informatics Center - UFPE)
Identifying the Number of Clusters in Short Text Using Bayesian Nonparametric Model .278 Jipeng Qiang (Yangzhou University), Yun Li (Yangzhou University), Yunhao Yuan (Yangzhou University), and Tong Wang (University of Massachusetts Boston)
Personalized EntityRank-Based Entity Linking with DBpedia .285 Huiying Li (Southeast University) and Jing Shi (Southeast University)

1.7 NEURAL MODELS II

Multi-layer Perceptrons for Subvocal Rec	ognition .293
Brian Coe (Unaffiliated)	

Modeling User-Item Profiles with Neural Networks for Rating Prediction .301 Lu Chen (East China Normal University), Jie Zhou (East China Normal University), Liang He (East China Normal University; Shanghai Engineering Research Center of Intelligent Service Robot), Qin Chen (East China Normal University), Jiacheng Zhang (East China Normal University), and Yan Yang (East China Normal University)
New Deep Neural Networks for Protein Model Evaluation .309. Junlin Wang (University of Missouri Columbia), Zhaoyu Li (University of Missouri Columbia), and Yi Shang (University of Missouri Columbia)
Perpendicular Bisector Constraint on Artificial Neural Network .3.14 Yiqi Chen (Graduate School at Shenzhen Tsinghua University), Binheng Song (Graduate School at Shenzhen), and Yufeng Ren (Tsinghua-Berkeley Shenzhen Institute)
Stock Trends Forecasting by Multi-layer Stochastic ANN Bagging .322 Hu Liu (graduate school at Shenzhen) and Binheng Song (gradate school at Shenzhen)
Training Convolutional Networks on Truncated Text .330 Joseph D. Prusa (Florida Atlantic University) and Taghi Khoshgoftaar (Florida Atlantic University)
Isolated Word Recognition with Audio Derivation and CNN .336 Jingjing Zhang (Shanghai Jiao Tong University), Shuangjiu Xiao (Shanghai Jiao Tong University), Huichao Zhang (Shanghai Jiao Tong University), and Lan Jiang (Shanghai Jiao Tong University)

1.8 AI METHODS

On the Numerical Representation of Labeled Graphs with Self-Loops .342 Victor Parque (Waseda University) and Tomoyuki Miyashita (Waseda University)
A Novel Approach Based on Relevance Learning Vector Quantization Applied to the Inference of High-Order SNPs Interactions .350
Flavia Roberta Barbosa Araujo (Universidade Federal de Pernambuco) and
Katia Silva Guimaraes (Universidade Federal de Pernambuco)
Bundling n-Stars in Polygonal Maps 358
Victor Parque (Waseda University) and Tomoyuki Miyashita (Waseda University)
Adaptive and Opportunistic Exploitation of Tree-Decompositions for Weighted CSPs .366 Philippe Jégou (Aix-Marseille Univ), Hélène Kanso (Aix-Marseille Univ), and Cyril Terrioux (Aix-Marseille Univ)
A ConArg-Based Library for Abstract Argumentation .3.74.
Stefano Bistarelli (University of Perugia, Italy), Fabio Rossi
(University of Perugia, Italy), and Francesco Santini (University of
Perugia, Italy)
Empirical Methods for Modelling Persuadees in Dialogical Argumentation .382 Anthony Hunter (University College London) and Sylwia Polberg (University College London)

Algorithm Discovery with Monte-Carlo Search: Controlling the Size .390..... Josef Moudík (Charles University), Tomáš Ken (Charles University), and Roman Neruda (Institute of Computer Science)

1.9 GAMES AND MODELS

Personalized Table-Top Game Recommendations .396 Yiu-Kai Ng (Brigham Young University) and Iris Seaman (Brigham Young University)	•••
Midgame Solving: A New Weapon for Efficient Large-Scale Equilibrium Approximation .404 Kailiang Hu (Harbin Institute of Technology) and Sam Ganzfried (Florida International University)	•••
 How Traders' Appearances and Moral Descriptions Influence Receivers' Choices in the Ultimatum Game .409 Anna Esposito (1Department of Psychology), Antonietta Esposito (21stituto Nazionale di Geofisica e Vulcanologia), Marilena Esposito (International Institute for Advanced Scientific Studies (IIASS)), Filomena Scibelli (Department of Psychology), Gennaro Cordasco (International Institute for Advanced Scientific Studies (IIASS)), Carl Vogel (School of Computer Science and Statistics), and Nikolaos Bourbakis (Wright State University) 	9
mproving Multi-robot Coordination by Game-Theoretic Learning Algorithms .4.17 Michalis Smyrnakis (New York University Abu Dhabi), Hongyang Qu (University of Sheffield), and Sandor Veres (University of Sheffield)	
An Attention Mechanism for Neural Answer Selection Using a Combined Global and Local View .425 Yoram Bachrach (DigitalGenius.com), Andrej Zukov-Gregoric (DigitalGenius.com), Sam Coope (DigitalGenius.com), Ed Tovell (DigitalGenius.com), Bogdan Maksak (DigitalGenius.com), Jose Rodriguez (DigitalGenius.com), Conan McMurtie (DigitalGenius.com), and Mahyar Bordbar (DigitalGenius.com)	
Generation of Obligation and Prohibition Dilemmas Using Knowledge Models .4.3. Azzeddine Benabbou (Université de technologie de Compiègne), Domitile Lourdeaux (Université de technologie de Compiègne), and Dominique Lenne (Université de technologie de Compiègne)	
A New Mimicking Attack by LSGAN .441 Degang Sun (School of Computer and Information Technology), Kun Yang (Institute of Information Engineering), Zhixin Shi (Institute of Information Engineering), and Chao Chen (Institute of Information Engineering)	

2.1 CLASSIFICATION METHODS

A Multi-local Means Based Nearest Neighbor Classifier .448.... Jianping Gou (JiangSu University), Wenmo Qiu (JiangSu University), Qirong Mao (JiangSu University), Yongzhao Zhan (JiangSu University), Xiangjun Shen (JiangSu University), and Yunbo Rao (University of Electronic Science and Technology of China)

Unsupervised Sentiment Classification: A Hybrid Sentiment-Topic Model Approach .453 Stuart J. Blair (Ulster University), Yaxin Bi (Ulster University), and Maurice D. Mulvenna (Ulster University)
Concept Drift Detection for Graph-Structured Classifiers under Scarcity of True Labels .461 Noppayut Sriwatanasakdi (Graduate School of Information Science and Technology), Masayuki Numao (The Institute of Scientific and Industrial Research), and Ken-ichi Fukui (The Institute of Scientific and Industrial Research)
Active Classification of Large 3D Shape Collection .469. Mofei Song (State Key Laboratory for Novel Software Technology) and Zhengxing Sun (State Key Laboratory for Novel Software Technology)
Online Classification of Nonstationary Streaming Data with Dynamic Pitman-Yor Diffusion Trees .4.77 Justin Sahs (The University of Texas at Dallas) and Latifur Khan (The University of Texas at Dallas)
Solving Social Media Text Classification Problems Using Code Fragment-Based XCSR .485 Muhammad Hassan Arif (Beihang University), Jianxin Li (Beihang University), and Muhammad Iqbal (Xtracta Limited)
Multi-view Spectral Clustering via Tensor-SVD Decomposition .493 Yan Zhang, Weiwei Yang, Bangtian Liu, Geyang Ke, Yan Pan, and Jian Yin

2.2 AI APPLICATIONS I

Combining Process Mining with Trace Clustering: Manufacturing Shop Floor Process - An Applied Case .498. Alex Meincheim (Weg Equipamentos Elétricos S/A), Cleiton dos Santos Garcia (Weg Equipamentos Elétricos S/A), Julio Cesar Nievola (Pontifficia Universidade Católica do Paraná (PUCPR)), and Edson Emfilio Scalabrin (Pontifficia Universidade Católica do Paraná (PUCPR))
Using Transferred Deep Model in Combination with Prior Features to Localize Multi-style Ship License
Numbers in Nature Scenes .506.
Baolong Liu (College of Computer Science and Technology), Xingzheng
Lyu (College of Computer Science and Technology), Chao Li (College of
Computer Science and Technology), Sanyuan Zhang (College of Computer
Science and Technology), Zhenjie Hong (College of Mathematics &
Information Science), and Xiuzi Ye (College of Mathematics &
Information Science)
An Observation Dimension Weight-Based U-Tree Algorithm .5.1.
Feng Liu (Nanjing University), Zian Wang (Nanjing University), and Qi
Tian (Nanjing University)
JamBot: Music Theory Aware Chord Based Generation of Polyphonic Music with LSTMs .5.19 Gino Brunner (ETH Zurich), Yuyi Wang (ETH Zurich), Roger Wattenhofer (ETH Zurich), and Jonas Wiesendanger (ETH Zurich)
Deep Networks and Continuous Distributed Representation of Protein Sequences for Protein Quality Assessment .527
Son Nguyen (Department of Electrical Engineering and Computer
Science), Zhaoyu Li (Department of Electrical Engineering and Computer
Science), and Yi Shang (Department of Electrical Engineering and
Computer Science)

BIRITS: A Music Information Retrieval System Using Query-by-Playing Techniques .535
Lucas Martiniano (Computer Music Technology Laboratory - Graduate
Program in Computer Science (PPGIa) - Pontifical Catholic University
of Paraná (PUCPR)) and Carlos N. Silla (Computer Music Technology
Laboratory - Graduate Program in Computer Science (PPGIa) - Pontifical
Catholic University of Paraná (PUCPR))

Ba	yesian Unigram-Based Inference for Expanding Abbreviations in Source Code .543
	Abdulrahman Alatawi (Department of Computer Science), Weifeng Xu
	(Department of Computer Science), and Dianxiang Xu (Department of
	Computer Science)

2.3 TRACKING AND PLANNING I

A Fuzzy Genetic Algorithm for Single-Machine Scheduling and Flexible Maintenance Planning Integration under Human Resource Constraints .551 Meriem Touat (Ecole nationale Supérieure d'Inforrmatique (ESI)/ Ecole Supérieure en Sciences Appliquées (ESSA)), Fatima Benbouzid-Si Tayeb (Ecole nationale Supérieure d'Inforrmatique (ESI)), Sabrina Bouzidi-Hassini (Ecole nationale Supérieure d'Inforrmatique (ESI)), and Belaid Benhamou (Univesite d'Aix-Marseille)
Extended Kernelized Correlation Tracking with Target Enhancement and Sample Selection .559 Peng Liu (Harbin Institute of Technology), Chang Liu (Harbin Institute of Technology), Wei Zhao (Harbin Institute of Technology), and Xianglong Tang (Harbin Institute of Technology)
Tracking and Detecting Dynamic Communities with Node Popularity Preservation .566 Limengzi Yuan (Tianjin University), Wenjun Wang (Tianjin University), Pengfei Jiao (Tianjin University), Di Jin (Tianjin University), and Wenxin Wei (University of California Los Angeles (UCLA))
Optical Flow Based Obstacle Avoidance for Multi-rotor Aerial Vehicles .5.74 Ruijuan Chang (Beihang University), Rong Ding (Beihang University), and Mengxiang Lin (Beihang University)
Heuristic Approach to Guarantee Safe Solutions in Probabilistic Planning .579 Rémi Lacaze-Labadie (Université de Technologie de Compiègne), Domitile Lourdeaux (Université de Technologie de Compiègne), and Mohamed Sallak (Université de Technologie de Compiégne)
A Feasible and Terrain-Insensitive Approach for Analyzing Power Wheelchair Users' Mobility .586 Fang Li (University of Central Oklahoma), Marcus Ong (University of Central Oklahoma), Yan Daniel Zhao (The University of Oklahoma Health Sciences Center), Gang Qian (University of Central Oklahoma), and Jicheng Fu (University of Central Oklahoma)
An F Test Based Method of Estimating the Number of Groups in an Organization .591 Guangquan Cheng (National University of Defense Technology), Yang Ma (National University of Defense Technology), Jincai Huang (National University of Defense Technology), and Kuihua Huang (National University of Defense Technology)

2.4 VISUAL COMPUTING

Effect of Field of View in Stereovision-Based Visual Homing .596. Damian Lyons (Fordham University), Luca DelSignore (Fordham University), and Benjamin Barriage (Fordham University)
Visual Relocalization Using Long-Short Term Memory Fully Convolutional Network .602 Zhou Lipu (Qualcomm Research)
 Weighted Score Based Fast Converging CO-training with Application to Audio-Visual Person Identification .610
Sparse Inductive Embedding: An Explorative Data Visualization Technique .618 Mahlagha Sedghi (University of Central Florida), Michael Georgiopoulos (University of Central Florida), and Georgios. C. Anagnostopoulos (Florida Institute of Technology)
 How Does a Camera Look at One 3D CAD Object? .623. Chuang Xing (China Agricultural University), Chengjiang Long (Kitware Inc.), Hao Guo (China Agricultural University), Yongwei Nie (South China University of Technology), Yuan Zhang (China Agricultural University), Dehai Zhu (China Agricultural University), Qin Ma (China Agricultural University), and Mengxiao Tian (China Agricultural University)
An Ontological Model for Urinary Profiles .628 Fabrício Henrique Rodrigues (Universidade Federal do Rio Grande do Sul), José Antônio Tesser Poloni (Universidade Federal de Ciências da Saúde de Porto Alegre), Mara Abel (Universidade Federal do Rio Grande do Sul), Cecília Dias Flores (Universidade Federal de Ciências da Saúde de Porto Alegre), and Liane Nanci Rotta (Universidade Federal de Ciências da Saúde de Porto Alegre)
Detecting People from Beach Images .636. <i>Ricardo Luna da Silva (Universidade Federal Rural de Pernambuco),</i> <i>Sérgio Chevtchenko (Universidade Federal Rural de Pernambuco), Allan</i> <i>Alves de Moura (Universidade Federal Rural de Pernambuco), Filipe</i> <i>Rolim Cordeiro (Universidade Federal Rural de Pernambuco), and Valmir</i> <i>Macario (Universidade Federal Rural de Pernambuco)</i>

2.5 PATTERN RECOGNITION AND ANALYSIS

Fuzzy Cognitive Maps Tool for Scenario Analysis and Pattern Classification .644 Gonzalo Nápoles (Universiteit Hasselt), Maikel Leon (University of Miami), Isel Grau (Universidad Central de Las Villas), and Koen Vanhoof (Universiteit Hasselt)
Neural Named Entity Recognition Using a Self-Attention Mechanism .652
Andrej Zukov-Gregoric (DigitalGenius Ltd), Yoram Bachrach
(DigitalGenius.com), Pasha Minkovsky (DigitalGenius.com), Sam Coope
(DigitalGenius.com), and Bogdan Maksak (DigitalGenius.com)

Detection and Recognition of U.S. Warning Signs on Curves .657 Yifei Fan (Georgia Institute of Technology) and Yichang (James) Tsai (Georgia Institute of Technology)
Enhancing AlexNet for Arabic Handwritten words Recognition Using Incremental Dropout .663 Rolla Almodfer (Wuhan University of Technology), Shengwu Xiong (Wuhan University of Technology), Mohammed Mudhsh (Wuhan University of Technology), and Pengfei Duan (Wuhan University of Technology)
Erasure Detection and Recognition on Children's Manuscript Essays .670 Marcos Tenório (Instituto Federal de Alagoas), Evandro Costa (Universidade Federal de Alagoas), and Tiago Vieira (Universidade Federal de Alagoas)
Group Affect Recognition: Visual - Facial Data Collection .677 Andreas Triantafyllou (University of Piraeus) and George Tsihrintzis (University of Piraeus)
Body Joints Selection Convolutional Neural Networks for Skeletal Action Recognition .682 Lizhang Hu (East China Normal University) and Jinhua Xu (East China Normal University)
2.6 OPTIMIZATION
Weather Routing Optimization: A New Shortest Path Algorithm .687 Estelle Chauveau (LSIS - CNRS), Philippe Jégou (LSIS - CNRS), and Nicolas Prcovic (LSIS - CNRS)

Improved Optimization Methods for Regularized Optimal Transport .695..... Shaobo Cui (Tsinghua-Berkeley Shenzhen Institute), Chaobing Song (Tsinghua-Berkeley Shenzhen Institute), and Yong Jiang (Tsinghua-Berkeley Shenzhen Institute)

A Hybrid Multi-objective Evolutionary Algorithm for Energy-Aware Allocation and Scheduling
Optimization of MPSoCs .701.
Rongjie Yan (State Key Laboratory of Computer Science), Yupeng Zhou
(Schlool of Computer Science and Information Technology), Yige Yan
(Schlool of Computer Science and Information Technology), Minghao Yin
(Schlool of Computer Science and Information Technology), Min Yu
(Department of ISEE), Feifei Ma (State Key Laboratory of Computer Science), and Kai Huang (Department of ISEE)

Particle Swarm Optimization Based on Dynamic Island Model .709..... Houda Abadlia (COSMOS Laboratory), Nadia Smairi (COSMOS Laboratory), and Khaled Ghedira (COSMOS Laboratory)

Dealing with User's Preferences in Mixed-Initiative Systems for Linear Optimization .7.17..... Alexis Gauthier (Department of Computer Science and Software Engineering), Jonathan Gaudreault (Department of Computer Science and Software Engineering), and Claude-Guy Quimper (Department of Computer Science and Software Engineering)

Deviance-Aware Discovery of High Quality Process Models .724..... Alfredo Cuzzocrea (Dept. DIA), Francesco Folino (ICAR-CNR), Massimo Guarascio (ICAR-CNR), and Luigi Pontieri (ICAR-CNR) Online POMDP with Heuristic Search and Sampling Applied to Real Time Strategy Games .7.32..... Thiago F. Naves (Federal University of Uberlandia) and Carlos Roberto Lopes (Federal University of Uberlandia)

2.7 BEHAVIORAL AND SOCIAL MODELS

Distributed Algorithm for Egalitarian Matching between Individuals and Activities with Additively Separable Preferences .739 Maxime Morge (Univ. Lille) and Antoine Nongaillard (Univ. Lille)
Automatic Predictions Using LDA for Learning through Social Networking Services .747 Christos Troussas (Department of Informatics), Akrivi Krouska (Department of Informatics), and Maria Virvou (Department of Informatics)
New Models for Two Variants of Popular Matching .752. Danuta Sorina Chisca (Insight Centre for Data Analytics), Mohamed Siala (Insight Centre for Data Analytics), Gilles Simonin (TASC - Institut Mines Telecom Atlantique), and Barry O'Sullivan (Insight Centre for Data Analytics)
Sentiment Analysis of Twitter Data: Emotions Revealed Regarding Donald Trump during the 2015-16 Primary Debates .760 Malak Abdullah (University of North Carolina at Charlotte) and Mirsad Hadzikadic (University of North Carolina at Charlotte)
Deep Fusion of Multiple Networks for Learning Latent Social Communities .765 Pengwei Hu (The Hong Kong Polytechnic University), Tiantian He (Department of Computing), Keith C.C. Chan (Department of Computing), and Henry Leung (Electrical and Computer Engineering)
Automated Detection of Substance Use-Related Social Media Posts Based on Image and Text Analysis .7.72 Arpita Roy (University of Maryland), Anamika Paul (University of Maryland), Hamed Pirsiavash (University of Maryland), and Shimei Pan (University of Maryland)
JRC: A Job Post and Resume Classification System for Online Recruitment .780 Abeer Zaroor (Computer Science Department), Mohammed Maree (Information Technology Department The Arab American University), and Muath Sabha (Information Technology Department The Arab American University)

2.8 RECOMMENDATION SYSTEMS

CURUMIM: A Serendipitous Recommender System for Tourism Based on Human Curiosity .788..... Alan Menk (Universitat Politècnica de València), Laura Sebastia (Universitat Politècnica de València), and Rebeca Ferreira (Universitat Politècnica de València)

Madrid Live: A Context-Aware Recomendar System of Leisure Plans .796..... Jose Luis Jorro-Aragoneses (Universidad Complutense de Madrid), Maria Belén Díaz Agudo (Universidad Complutense de Madrid), and Juan Antonio Recio García (Universidad Complutense de Madrid)

2.9 AI LOGIC AND CONSTRAINTS II

On Computing One Max_Subset Inclusion Consensus .838 Éric Grégoire (CRIL - Univ Artois & CNRS), Yacine Izza (CRIL - Univ Artois & CNRS), and Jean-Marie Lagniez (CRIL - Univ Artois & CNRS)
An Instance Based Model for Scalable Theta -Subsumption .846 Hippolyte Léger (Université Paris 13), Dominique Bouthinon (Université Paris 13), Mustapha Lebbah (Université Paris 13), and Hanene Azzag (Université Paris 13)
Subsumption and Incompatibility between Principles in Ranking-Based Argumentation .853 Philippe Besnard (CNRS - IRIT), Victor David (IRIT), Sylvie Doutre (IRIT - University Toulouse 1 Capitole), and Dominique Longin (CNRS - IRIT)
 Multiple Fault Localization Using Constraint Programming and Pattern Mining .860 Noureddine Aribi (LITIO - University of Oran 1), Mehdi Maamar (CNRS - CRIL), Nadjib Lazaar (LIRMM - University of Montpellier), Yahia Lebbah (LITIO - University of Oran 1), and Samir Loudni (CNRS)

Mixed Radix Weight Totalizer Encoding for Pseudo-Boolean Constraints .868
Aolong Zha (Graduate School of Information Science and Electrical
Engineering), Naoki Uemura (Graduate School of Information Science and
Electrical Engineering), Miyuki Koshimura (Faculty of Information
Science and Electrical Engineering), and Hiroshi Fujita (Faculty of
Information Science and Electrical Engineering)
On Selecting Constraints for Replication in Model Checking .8.76.
Guillaume Baud-Berthier (SafeRiver) and Laurent Simon (LaBRI)

3.1 DECISION AND SELECTION SYSTEMS

Uncertainty Management for Rule-Based Decision Support Systems .884 Quratul-ain Mahesar (University of Leeds), Vania Dimitrova (University of Leeds), Derek Magee (University of Leeds), and Anthony Cohn (University of Leeds)
Distributed Sequential Decision in Rail Transit Cognitive Radio .892 Cheng Wu (Soochow University), Yiming Wang (Soochow University), and Zhijie Yin (Soochow University)
Feature Selection based on Discernibility Function in Incomplete Data with Fuzzy Decision .899 Wenbin Qian (School of Software), Wenhao Shu (School of Information Engineering), Jun Liu (School of Software), and Yinglong Wang (School of Software)
Decision Stream: Cultivating Deep Decision Trees .905 Dmitry Ignatov (Huawei Technologies) and Andrey Ignatov (ETH Zurich)
Distributed Negotiation for Collective Decision-Making .9.13 Ndeye Arame Diago (University of Lyon 1), Samir Aknine (University of Lyon 1), Sarvapali Ramchurn (University of Southampton), Onn Shehory (Bar Ilan university), and Mbaye Sene (University of Dakar)
Efficient Prototype Selection Supported by Subspace Partitions .921 Joel Luís Carbonera (IBM research) and Mara Abel (UFRGS)
Gaussian Weighting Reversion Strategy for Accurate On-Line Portfolio Selection .929 Zekun Ye (Fudan University), Kai Huang (Fudan University), Shuigeng Zhou (Fudan University), and Jihong Guan (Tongji University)

3.2 TRACKING AND PLANNING II

Evaluating Hardware Platforms and Path Re-planning Strategies for the UAV Emergency Landing Problem .937 Jesimar da Silva Arantes (University of São Paulo), Márcio da Silva Arantes (University of São Paulo), André Badawi Missaglia (University of São Paulo), Eduardo do Valle Simoes (University of São Paulo), and Claudio Fabiano Motta Toledo (University of São Paulo)

Real-Time Detection, Tracking and Classification of Multiple Moving Objects in UAV Videos .945 Hüseyin Can Baykara (Department of Electrical and Electronics Engineering), Erdem Byk (Department of Electrical and Electronics Engineering), Gamze Gül (Department of Electrical and Electronics Engineering), Deniz Onural (Department of Electrical and Electronics Engineering), and Ahmet Safa Öztürk (Department of Electrical and Electronics Engineering)
Robust Inverse Planning Approaches for Policy Estimation of Semi-autonomous Agents .951 Mathieu Lelerre (Université de Caen Normandie), Abdel-Illah Mouaddib (Université de Caen Normandie), and Laurent Jeanpierre (Université de Caen Normandie)
Modeling and Solving the Multi-agent Pathfinding Problem in Picat .959 Roman Barták (Charles University), Neng-Fa Zhou (CUNY Brooklyn College and Graduate Center), Roni Stern (Ben Gurion University of the Negev Beer Sheva), Eli Boyarski (Ben Gurion University of the Negev Beer Sheva), and Pavel Surynek (AIST)
An Effective Simulated Annealing for Off-Line Robot Motion Planning .967 Andrea Figueroa (Universidad Técnica Federico Santa María), Elizabeth Montero (Universidad Técnica Federico Santa María), and María-Cristina Riff (Universidad Técnica Federico Santa María)
Towards a Safer Planning and Execution Concept .9.72 Lukáš Chrpa (Charles University; Czech Technical University in Prague), Jakub Gemrot (Charles University), and Martin Pilát (Charles University)
Open Decentralized POMDPs .977 Jonathan Cohen (University of Caen), Jilles-Steeve Dibangoye (INSA Lyon), and Abdel-Illah Mouaddib (University of Caen)

3.3 SMART CITIES AND SMART GRID

Intelligent Fault Analysis in Electrical Power Grids .985 Biswarup Bhattacharya (University of Southern California) and Abhishek Sinha (Adobe Systems Incorporated)
A Hybrid Agent-Based and Probabilistic Model for Fine-Grained Behavioural Energy Waste Simulation .991 Fatima Abdallah (Birmingham City University), Shadi Basurra (Birmingham City University), and Mohamed Medhat Gaber (Birmingham City University)
Using CV-CRITIC to Determine Weights for Smart City Evaluation .996 Qiaoyun Yin (Computer School), Ke Niu (Computer School), and Ning Li (Computer School)
Some Neighbourhood Approaches for the Antenna Positioning Problem .1001 Larbi Benmezal (Aix Marseille Université & Université des Sciences et de la Technologie Houari Boumediene), Belaid Benhamou (Aix Marseille Université), and Dalila Boughaci (Université des Sciences et de la Technologie Houari Boumediene)

Enhancing Autonomous Vehicles with Commonsense: Smart Mobility in Smart Cities1	008
Priya Persaud (Rutgers Law School), Aparna S. Varde (Montclair State	
University), and Stefan Robila (Montclair State University)	
A Local Leader Election Protocol Applied to Decentralized Traffic Regulation	.013
Roua Elchamaa (Univ. Lyon), Maxime Guériau (Univ. Lyon), Baudouin	
Dafflon (Univ. Lyon), Rima Kilany Chamoun (Saint-Joseph University	
(ESIB)), and Yacine Ouzrout (Univ. Lyon)	
Fuzzy Multi-kernel Approach in Intelligent Control of Energy Consumption in Smart Cities	.021
Miltiadis Alamaniotis (Purdue University) and Lefteri Tsoukalas	
(Purdue University)	

3.4 AI LOGIC AND CONSTRAINTS III

Using Gate Recognition and Random Simulation for Under-Approximation and Optimized Branching in SAT Solvers
Correlation Heuristics for Constraint Programming
Computing Robust Principal Components by A* Search
On Computing Generalized Backbones
Approximating MAP Inference in Credal Networks Using Probability-Possibility Transformations
Acquiring Local Preferences of Weighted Partial MaxSAT
Making the First Solution Good! 1073 Jean-Guillaume Fages (COSLING) and Charles Prud'Homme (IMT Atlantique)

3.5 GRAPHS AND NET MODELS

Weak Majority Closed Constraint Satisfaction Problems are Tractable	N/A
Wady Naanaa (University of Tunis El Manar)	

Protein Loop Modeling Using Deep Generative Adversarial Network .1085 Zhaoyu Li (Department of Electrical Engineering and Computer Science), Son P. Nguyen (Department of Electrical Engineering and Computer Science), Dong Xu (Department of Electrical Engineering and Computer Science), and Yi Shang (Department of Electrical Engineering and Computer Science)
A Numerical Differentiation Based Dendritic Cell Model <u>1092</u>
School of Wuhan University), Hongbin Dong (International school of software), Chengyu Tan (Computer School of Wuhan University), Zhenhua
Xiao (Computer School of Wuhan University), and Weiwei Liu (Computer School of Wuhan University)
Efficient Local Search for Maximum Weight Cliques in Large Graphs .1099
It Fan (Department of Computer Science), Longite Ma (Institute for Integrated and Intelligent Systems), Kaile Su (Institute for
Integrated and Intelligent Systems), Kutte Su (Institute Joh Integrated and Intelligent Systems), Chengaian Li (Department of
Computer Science), Cong Rao (Department of Computer and Information
Science), Ren-Hau Liu (Department of Computer and Information
Science), and Longin Jan Latecki (Department of Computer and Information Science)
Pseudo-Tree Construction Heuristics for DCOPs and Evaluations on the ns-2 Network Simulator .1.105 Atena M. Tabakhi (Washington University in St. Louis), Reza Tourani (New Mexico State University), Francisco Natividad (New Mexico State University), William Yeoh (Washington University in St. Louis), and Satvajayant Misra (New Mexico State University)
Nature-Inspired Graph Optimization for Dimensionality Reduction .1.11.3
Cupertino (Salfo Paulo State Finance Secretariat), Ran Cheng
(University of Birmingham), Yaochu Jin (University of Surrey), and Liang Zhao (University of Sao Paulo)
Hub-Authority Cores and Attributed Directed Network Mining .1.120 Henry Soldano (LIPN), Guillaume Santini (LIPN), Dominique Bouthinon (LIPN), and Emmanuel Lazega (CSO-CNRS and SPC)
3.6 TRANSPORTATION ISSUES IN SMART CITIES
Drivelle Dead Detection Dead on Dilated EDN with Electrons Assured in 1129
Xiaolong Liu (Tsinghua University), Zhidong Deng (Tsinghua University), and Guorun Yang (Tsinghua university)
Intercity Transportation Construction Based on Link Prediction 1135.

Yang Ma (National University of Defense Technology), Xingxing Liang (National University of Defense Technology), Jincai Huang (National University of Defense Technology), and Guangquan Cheng (National University of Defense Technology)

A Language for UAV Traffic Rules in an Urban Environment and Decentralized Scenario .1.139..... Giuseppe Lombardi (Department of Engineering and Architecture), Eric Medvet (Department of Engineering and Architecture), and Alberto Bartoli (Department of Engineering and Architecture)

- A Constraint-Based Coordination Model to Advantage Buses in Urban Traffic .1.144..... Matthis Garciarz (UMR CNRS 5205 LIRIS), Samir Aknine (UMR CNRS 5205 LIRIS), and Huan Vu (UMR CNRS 5205 LIRIS)
- Integrating an Adjusted Conversational Agent into a Mobile-Assisted Language Learning Application .1.15.3.. Christos Troussas (Department of Informatics), Akrivi Krouska (Department of Informatics), and Maria Virvou (Department of Informatics)
- Computing Multicriteria Shortest Paths in Stochastic Multimodal Networks Using a Memetic Algorithm .1.158 *Omar Dib (IRT SystemX), Alexandre Caminada (OPERA-UTBM-UBFC), Marie-Ange Manier (OPERA-UTBM-UBFC), and Laurent Moalic (Université de Haute-Alsace)*

An Evaluation of Meta-Heuristic Approaches for Improve the Separation of Multiple Partial Discharge

Sources and Electrical Noise .1.166..... Elizabeth Montero (Universidad Técnica Federico Santa María), Nicolás Medina (Universidad Técnica Federico Santa María), and Jorge Ardila-Rey (Universidad Técnica Federico Santa María)

3.7 SEMANTIC MODELS

Properties and Implementation of a Two-Step Ranking-Based Semantics: On Revising NaE and SC .1.17.4..... Francesco Santini (Department of Mathematics and Computer Science)

Braham (PRINCE Research Lab ISITCom H- Sousse)

- A Smart IoT Platform for Personalized Healthcare Monitoring Using Semantic Technologies .1.198..... Ahmed Dridi (ISG), Salma Sassi (FSJEGJ), and Sami Faiz (ISAMM)
- Flexible Expert Finding on the Web via Semantic Hypergraph Learning and Affinity Propagation Model .1204 Yang Yan (Institute of Information Engineering), Tingwen Liu (Institute of Information Engineering), Jinqiao Shi (Institute of Information Engineering), Qiuyan Wang (Tianjin Polytechnic University), and Li Guo (Institute of Information Engineering)
- Time-Weighted LSTM Model with Redefined Labeling for Stock Trend Prediction .1210..... Zhiyong Zhao (Shanghai Jiao Tong University), Ruonan Rao (Shanghai Jiao Tong University), Shaoxiong Tu (Shanghai Jiao Tong University), and Jun Shi (Shanghai Rongshi Investment Management Co. Ltd.)
- iOOBN: A Bayesian Network Modelling Tool Using Object Oriented Bayesian Networks with Inheritance .1218 Md Samiullah (Monash University), Thao Xuan Hoang (Monash University), David Albrecht (Monash University), Ann Nicholson (Monash University), and Kevin Korb (Monash University)

3.8 AI APPLICATIONS II

Language Modelling for Collaborative Filtering: Application to Job Applicant Matching .1226 <i>Thomas Schmitt (LRI), François Gonard (LRI), Philippe Caillou (LRI),</i> <i>and Michele Sebag (LRI)</i>
Skyline Computation and Maintenance over Imperfect Databases: A Marginal-Points-Based Approach .1234. Sayda Elmi (LIAS/ENSMA), Allel Hadjali (ENSMA), Mohamed Anis Bach Tobji (ESEN), and Boutheina Ben Yaghlane (IHEC Carthage)
APHID-Draughts: Comparing the Synchronous and Asynchronous Parallelism Approaches for the Alpha-Beta Algorithm Applied to Checkers .1243 Lidia Bononi Paiva Tomaz (Federal University of Uberlandia), Rita Maria Silva Julia (Federal University of Uberlandia), and Matheus Prado Prandini Faria (Federal University of Uberlandia)
A Normative Model for Holonic Multi-agent Systems .125.1 Ezzine Missaoui (ENSI), Belhassen Mazigh (Department of Computer Sciences FSM), Sami Bhiri (OASIS-ENIT), and Vincent Hilaire (Univ Bourgogne Franche-Comté)
Pseudo-Based Relevance Analysis for Information Retrieval .1259 Rong Yan (College of Computer Science) and Guanglai Gao (College of Computer Science)
Intelligent Signal Processing for Dust Storm Prediction Using Ensemble Case-Based Reasoning .1267 Tariq Saad Al Murayziq (University of Brighton), Stelios Kapetanakis (University of Brighton), and Miltos Petridis (Middlesex University)
Dilated Deep Residual Network for Image Denoising .1272 Tianyang Wang (Northwest Missouri State University), Mingxuan Sun (Louisiana State University), and Kaoning Hu (Texas A&M University-Commerce)

3.9 MISCELLANEOUS AI ISSUES

Boosting a Bridge Artificial Intelligence .1280 Veronique Ventos (Laboratoire Recherche Informatique), Yves Costel (Lyon), Olivier Teytaud (UMR 8623), and Solène Thépaut Ventos (UMR 8623)
Epistemic Specifications with Probabilities .1288 Shutao Zhang (Southeast University of China) and Zhizheng Zhang (Southeast University of China)
Topics may Evolve: Using Complaint Data for Analysis .1296. Lu-yao Xie (Nanjing University), Lu-Xia Wang (Nanjing University), Heng-Yang Lu (Nanjing University), Ning Li (Nanjing University), and Chong-Jun Wangchj (Nanjing University)
When Vehicular Networks meet Artificial Intelligence .1304 Manuel Fogue (iNiT Research Group), Julio A. Sanguesa (iNiT Research Group), Francisco J. Martinez (iNiT Research Group), and Johann M. Marquez-Barja (University of Antwerp - imec)

Out-of-Class Novelty Generation : An Experimental Foundation Mehdi Cherti (LAL/LRI), Balázs Kégl (LAL/LRI), and Akin Kazakç (MINES ParisTech)	
Resource-Based Dynamic Rewards for Factored MDPs	
of Bristol), Kevin McAreavey (University of Bristol), Weiru Liu	
(University of Bristol), and Jun Hong (University of West England)	
Co-construction of Adaptive Public Policies Using SmartGov	1328
Simon Pageaud (LIRIS), Véronique Deslandres (LIRIS), Vassilissa Lehoux	
(NAVER LABS Europe), and Salima Hassas (LIRIS)	

Author Index