

## Contents – Part VI

### Workshop on Software Engineering Processes and Applications (SEPA 2017)

MC-DMN: Meeting MCDM with DMN Involving Multi-criteria Decision-Making in Business Process . . . . .	3
<i>Riadh Ghlala, Zahra Kodia Aouina, and Lamjed Ben Said</i>	
Context Sensitive Query Correction Method for Query-Based Text Summarization . . . . .	17
<i>Nazreena Rahman and Bhogeswar Borah</i>	
Ontological Controlling the Lexical Items in Conceptual Solution of Project Tasks . . . . .	31
<i>P. Sosnin and A. Pushkareva</i>	
IoT-Based Healthcare Applications: A Review . . . . .	47
<i>Itamir de Morais Barroca Filho and Gibeon Soares de Aquino Junior</i>	
Fast Semi-blind Color Image Watermarking Scheme Using DWT and Extreme Learning Machine . . . . .	63
<i>Anurag Mishra, Ankit Rajpal, and Rajni Bala</i>	
Quality Enhancement of Location Based Services Through Real Time Context Aware Obfuscation Using Crowd Sourcing. . . . .	79
<i>Priti Jagwani and Saroj Kaushik</i>	
A Model-Based Testing Method for Dynamic Aspect-Oriented Software . . . .	95
<i>Maria Laura Pires Souza and Fábio Fagundes Silveira</i>	
The Impacts of Using SNSs on e-WOM and Knowledge Sharing Through Social Capital: An Empirical Study in Vietnam. . . . .	112
<i>Quoc Trung Pham and Vi Khiet Huynh</i>	
An Experiment to Evaluate Software Development Teams by Using Object-Oriented Metrics . . . . .	128
<i>Jamille S. Madureira, Anderson S. Barroso, Rogerio P.C. do Nascimento, and Michel S. Soares</i>	
An Event-Based Technique to Trace Requirements Modeled with SysML . . .	145
<i>Telmo Oliveira de Jesus and Michel S. Soares</i>	

Test Case/Step Minimization for Visual Programming Language Models and Its Application to Space Systems . . . . .	160
<i>Paulo Nolberto dos Santos Alarcon and Valdivino Alexandre de Santiago Júnior</i>	
A System Based on Intelligent Documents: A Case Study . . . . .	176
<i>Jaroslav Král, Petr Novák, and Michal Žemlička</i>	
Proposing an IoT-Based Healthcare Platform to Integrate Patients, Physicians and Ambulance Services . . . . .	188
<i>Itamir de Moraes Barroca Filho and Gibeon Soares de Aquino Junior</i>	
A Systematic Literature Review on Microservices . . . . .	203
<i>Hulya Vural, Murat Koyuncu, and Sinem Guney</i>	
Separation Logic for States Dependencies in Life Cycles of Android Activities and Fragments . . . . .	218
<i>Mohamed A. El-Zawawy</i>	
Posting Graphs for Finding Non-Terminating Executions in Asynchronous Programs. . . . .	233
<i>Mohamed A. El-Zawawy</i>	
Software Analytics for Web Usability: A Systematic Mapping . . . . .	246
<i>Lucas Henrique Pellizon, Joelma Choma, Tiago Silva da Silva, Eduardo Guerra, and Luciana Zaina</i>	
Representing Contextual Relations with Sanskrit Word Embeddings. . . . .	262
<i>Ishank Sharma, Shrey Anand, Rinkaj Goyal, and Sanjay Misra</i>	
A Mobile-Sensor Fire Prevention System Based on the Internet of Things . . .	274
<i>Julio César Rosas, José Alfonso Aguilar, Carolina Tripp-Barba, Roberto Espinosa, and Pedro Aguilar</i>	
Geographical Information System for Patients, Neoplasms and Associated Environmental Contamination. . . . .	284
<i>Jesús Leonardo Soto-Sumuano, Francisco Javier Olivera-Guerrero, José Alberto Tlacuilo-Parra, Roberto Garibaldi Covarrubias, Hugo Romo-Rubio, and Emmanuel Abundis-Gutierrez</i>	
Implementation and Performance Comparison of a Four-Bit Ripple-Carry Adder Using Different MOS Current Mode Logic Topologies . . . . .	299
<i>Naman Saxena, Shruti Dutta, Neeta Pandey, and Kirti Gupta</i>	
Evaluation of Facial Expressions for Automatic Interpretation and Classification of Motivation by Means of Computer Techniques . . . . .	314
<i>Catalina Alejandra Vázquez Rodríguez and Raúl Pinto Elías</i>	

Nearness and Influence Based Link Prediction (NILP) in Distributed Platform . . . . .	325
<i>Ranjan Kumar Behera, Lov Kumar, Monalisa Jena, Sambit Mahapatra, Abhishek Sai Shukla, and Santanu Kumar Rath</i>	
Requirements Engineering for Cloud Systems: A Mapping Study Design . . . .	335
<i>Fernando Wanderley, Eric Souza, Miguel Goulão, Joao Araujo, Gilberto Cysneiros, and Ananya Misra</i>	
Improved Energy-Efficient Target Coverage in Wireless Sensor Networks . . .	350
<i>Bhawani S. Panda, Bijaya K. Bhatta, and Sambit Kumar Mishra</i>	
Standard Propagation Model Tuning for Path Loss Predictions in Built-Up Environments . . . . .	363
<i>Segun I. Popoola, Aderemi A. Atayero, Nasir Faruk, Carlos T. Calafate, Lukman A. Olawoyin, and Victor O. Matthews</i>	
<b>Workshop on Sustainability Performance Assessment: Models, Approaches and Applications Toward Interdisciplinary and Integrated Solutions (SPA 2017)</b>	
Ecosystem Services and the Natura 2000 Network: A Study Concerning a Green Infrastructure Based on Ecological Corridors in the Metropolitan City of Cagliari. . . . .	379
<i>Ignazio Cannas and Corrado Zoppi</i>	
Planning with Ecosystem Services in the Natura 2000 Network of the Metropolitan City of Cagliari . . . . .	401
<i>Maddalena Floris and Daniela Ruggeri</i>	
Citizen Engagement for Sustainable Development of Port Cities: The Public Debate About Development Projects of Livorno Port. . . . .	416
<i>Claudia Casini</i>	
Market Prices and Institutional Values: Comparison for Tax Purposes Through GIS Instrument . . . . .	430
<i>Gianluigi De Mare, Antonio Nesticò, Maria Macchiaroli, and Luigi Dolores</i>	
Daily Temperature and Precipitation Prediction Using Neuro-Fuzzy Networks and Weather Generators. . . . .	441
<i>Vito Telesca, Donatella Caniani, Stefania Calace, Lucia Marotta, and Ignazio M. Mancini</i>	
Bridging Biodiversity Conservation Objectives with Landscape Planning Through Green Infrastructures: A Case Study from Sardinia, Italy. . . . .	456
<i>Sabrina Lai and Federica Leone</i>	

Assessing the Investments Sustainability After the New Code on Public Contracts . . . . .	473
<i>Manuela Rebaudengo and Francesco Prizzon</i>	
Quality of Life and Social Inclusion of Inland Areas: A Multidimensional Approach to Performance Policies and Planning Assessment . . . . .	485
<i>Carmelina Prete, Mario Cozzi, Mauro Viccaro, and Severino Romano</i>	
An Operative Framework to Support Implementation Plan Design Applied in Transnational Cooperation Project . . . . .	501
<i>Francesco Scorza and Beatrice Giuzio</i>	
A Renewed Rational Approach from Liquid Society Towards Anti-fragile Planning . . . . .	517
<i>Giuseppe Las Casas and Francesco Scorza</i>	
Conflicts Between Environmental Protection and Energy Regeneration of the Historic Heritage in the Case of the City of Matera: Tools for Assessing and Dimensioning of Sustainable Energy Action Plans (SEAP) . . .	527
<i>Francesco Scorza, Luigi Santopietro, Beatrice Giuzio, Federico Amato, Beniamino Murgante, and Giuseppe Las Casas</i>	
Measuring Territorial Specialization in Tourism Sector: The Basilicata Region Case Study . . . . .	540
<i>Francesco Scorza, Ylenia Fortino, Beatrice Giuzio, Beniamino Murgante, and Giuseppe Las Casas</i>	
Four Perspectives of Applied Sustainability: Research Implications and Possible Integrations . . . . .	554
<i>Jolanta Dvarioniene, Valentin Grecu, Sabrina Lai, and Francesco Scorza</i>	
Making Urban Regeneration Feasible: Tools and Procedures to Integrate Urban Agenda and UE Cohesion Regional Programs . . . . .	564
<i>Piergiuseppe Pontrandolfi and Francesco Scorza</i>	
Engaged Communities for Low Carbon Development Process . . . . .	573
<i>Alessandro Attolico, Ian Bloomfield, Jolanta Dvarioniene, Inga Gurauskiene, Daina Kliaugaitė, Balazs Mezosi, and Francesco Scorza</i>	
A Quantitative Measure of Habitat Quality to Support the Implementation of Sustainable Urban Planning Measures . . . . .	585
<i>Rosa Epifani, Federico Amato, Beniamino Murgante, and Gabriele Nolè</i>	
Incentives for Social Sustainability of the Third Sector in Lithuania . . . . .	601
<i>Džiugas Dvarionas</i>	

Conversion of Dual Fuel Opportunities in Indonesia Waterways . . . . .	610
<i>Rizqi Fitra, Fredhi Agung Prasetyo, Rudiyanto Rudiyanto, and Tutut Herawan</i>	

### **Workshop on Advances in Spatio-Temporal Analytics (ST-Analytics 2017)**

Classification Method by Information Loss Minimization for Visualizing Spatial Data . . . . .	623
<i>Toshihiro Osaragi</i>	
Online Reverse Subpattern Matching for Reproducing Trajectories from Sub-paths. . . . .	635
<i>Marie Kiermeier</i>	
An Algorithm to Discover Partners in Trajectories. . . . .	647
<i>Diego Vilela Monteiro, Karine Reis Ferreira, and Rafael Santos</i>	
Clustering Methods to Asses Land Cover Samples of MODIS Vegetation Indexes Time Series . . . . .	662
<i>Lorena A. Santos, Rolf E.O. Simoes, Karine R. Ferreira, Gilberto R. de Queiroz, Gilberto Camara, and Rafael D.C. Santos</i>	
Gisplay- Extensible Web API for Thematic Maps with WebGL . . . . .	674
<i>Diogo Cardoso, Rui Alves, João Moura Pires, Fernando Birra, and Ricardo Silva</i>	

### **Short Papers**

Theoretical Model of the Total Mass of Ejecta from Unmelted Metals. . . . .	693
<i>Anmin He, Jun Liu, JianLi Shao, and Pei Wang</i>	
Influence of Void Coalescence by Direct Impingement on Spall Response of Polycrystalline Metal. . . . .	701
<i>Feng-guo Zhang, Jian-li Shao, Pei Wang, and Qi-jing Feng</i>	
Sentiment Analysis Applied to Hotels Evaluation . . . . .	710
<i>Gustavo Soares Martins, Alcione de Paiva Oliveira, and Alexandra Moreira</i>	
Analyzing and Inferring Distance Metrics on the Particle Competition and Cooperation Algorithm . . . . .	717
<i>Lucas Guerreiro and Fabricio Breve</i>	
The D'Alembert Type Solution of the Cauchy Problem for the Homogeneous with Respect to Fourth Order Derivatives for Hyperbolic Equation. . . . .	726
<i>Mahir Rasulov, Zafer Aslan, Bahaddin Sinsoysal, and Hakan Bal</i>	

A Nonlinear Finite Element Formulation Based on Multiscale Approach to Solve Compressible Euler Equations . . . . .	735
<i>Sérgio Souza Bento, Paulo Wander Barbosa, Isaac P. Santos, Leonardo Muniz de Lima, and Lucia Catabriga</i>	
Pump Efficiency Analysis of Waste Water Treatment Plants: A Data Mining Approach Using Signal Decomposition for Decision Making. . . . .	744
<i>Dario Torregrossa, Joachim Hansen, Francesc Hernández-Sancho, Alex Cornelissen, Georges Schutz, and Ulrich Leopold</i>	
“It Sounds Wrong...” Does Music Affect Moral Judgement? . . . . .	753
<i>Alessandro Ansani, Francesca D’Errico, and Isabella Poggi</i>	
Using Accelerometers to Improve Real Time Railway Monitoring Systems Based on WSN. . . . .	761
<i>Suzane G. dos Santos, Iury R.S. de Araújo, Eudisley G. Anjos, Romulo C.C. Araújo, and Francisco A. Belo</i>	
Comparative Analysis of Two Variants of the Knox Test: Inferences from Space-Time Crime Pattern Analysis. . . . .	770
<i>Monsuru Adepeju and Andy Evans</i>	
Testing the Adequacy of a Single-Value Monte Carlo Simulation for Space-Time Interaction Analysis of Crime . . . . .	779
<i>Monsuru Adepeju</i>	
Transport Properties of Liquid Aluminum at High Pressure from Quantum Molecular Dynamics Simulations . . . . .	787
<i>Shuaichuang Wang and Haifeng Liu</i>	
<b>Author Index . . . . .</b>	<b>797</b>

Computational Science and Its Applications – ICCSA  
2017

17th International Conference, Trieste, Italy, July 3-6,  
2017, Proceedings, Part VI

Gervasi, O.; Murgante, B.; Misra, S.; Borruso, G.; Torre,  
C.M.; Rocha, A.M.A.C.; Tanir, D.; Apduhan, B.O.;  
Stankova, E.; Cuzzocrea, A. (Eds.)

2017, XXXVI, 799 p. 315 illus., Softcover

ISBN: 978-3-319-62406-8