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# Computational Science and Its Applications – ICCSA 2018

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## Preface

These multiple volumes (LNCS volumes 10960–10964) consist of the peer-reviewed papers presented at the 2018 International Conference on Computational Science and Its Applications (ICCSA 2018) held in Melbourne, Australia, during July 2–5, 2018.

ICCSA 2018 was a successful event in the International Conferences on Computational Science and Its Applications (ICCSA) conference series, previously held in Trieste, Italy (2017), Beijing, China (2016), Banff, Canada (2015), Guimaraes, Portugal (2014), Ho Chi Minh City, Vietnam (2013), Salvador, Brazil (2012), Santander, Spain (2011), Fukuoka, Japan (2010), Suwon, South Korea (2009), Perugia, Italy (2008), Kuala Lumpur, Malaysia (2007), Glasgow, UK (2006), Singapore (2005), Assisi, Italy (2004), Montreal, Canada (2003), and (as ICCS) Amsterdam, The Netherlands (2002) and San Francisco, USA (2001).

Computational science is a main pillar of most current research and industrial and commercial activities and it plays a unique role in exploiting ICT innovative technologies. The ICCSA conference series has been providing a venue to researchers and industry practitioners to discuss new ideas, to share complex problems and their solutions, and to shape new trends in computational science.

Apart from the general tracks, ICCSA 2018 also included 33 international workshops, in various areas of computational sciences, ranging from computational science technologies, to specific areas of computational sciences, such as computer graphics and virtual reality. The program also featured three keynote speeches.

The success of the ICCSA conference series, in general, and ICCSA 2018, in particular, is due to the support of many people: authors, presenters, participants, keynote speakers, session chairs, Organizing Committee members, student volunteers, Program Committee members, International Advisory Committee members, International Liaison chairs, and people in other various roles. We would like to thank them all.

We would also like to thank Springer for their continuous support in publishing the ICCSA conference proceedings and for sponsoring some of the paper awards.

July 2018

David Taniar  
Bernady O. Apduhan  
Osvaldo Gervasi  
Beniamino Murgante  
Ana Maria A. C. Rocha

## Contents – Part V

### Workshop Cities, Technologies and Planning (CTP 2018)

Spatial Data Analysis and Evaluation by Urban Planners of a PPGIS Experiment Performed in Porto Alegre, Brazil . . . . .	3
<i>Geisa Bugs</i>	
A GIS-Based Method to Assess the Pedestrian Accessibility to the Railway Stations . . . . .	19
<i>Gabriele D'Orso and Marco Migliore</i>	
Urban Regeneration for a Sustainable and Resilient City: An Experimentation in Matera . . . . .	31
<i>Piergiuseppe Pontrandolfi and Benedetto Manganelli</i>	
Internal Areas and Smart Tourism. Promoting Territories in Sardinia Island . . . . .	44
<i>Silvia Battino, Ginevra Balletto, Giuseppe Borruso, and Carlo Donato</i>	
Gentrification and Sport. Football Stadiums and Changes in the Urban Rent . . . . .	58
<i>Ginevra Balletto, Giuseppe Borruso, Francesco Tajani, and Carmelo M. Torre</i>	
ALARP Approach for Risk Assessment of Civil Engineering Projects . . . . .	75
<i>Gianluigi De Mare, Antonio Nesticò, Renato Benintendi, and Gabriella Maselli</i>	
Smart Block EAN: Ten Scalable Initiatives for a Smart City . . . . .	87
<i>Alix E. Rojas, Camilo Mejía-Moncayo, and Leonardo Rodríguez-Urrego</i>	
Spatial Indicators to Evaluate Urban Fragmentation in Basilicata Region . . . . .	100
<i>Lucia Saganeiti, Angela Pilogallo, Francesco Scorza, Giovanni Mussuto, and Beniamino Murgante</i>	
Increasing the Walkability Level Through a Participation Process . . . . .	113
<i>Raffaella Carbone, Lucia Saganeiti, Francesco Scorza, and Beniamino Murgante</i>	

**Workshop Defense Technology and Security (DTS 2018)**

VM-CFI: Control-Flow Integrity for Virtual Machine Kernel Using Intel PT . . . . .	127
<i>Donghyun Kwon, Jiwon Seo, Sehyun Baek, Giyeol Kim, Sunwoo Ahn, and Yunheung Paek</i>	
Study on Classification of Defense Scientific and Technical Information in Korea . . . . .	138
<i>Ara Hur and Yeonseung Ryu</i>	
A FPGA-Based Scheme for Protecting Weapon System Software Technology . . . . .	148
<i>Minhae Jang, Yeonseung Ryu, and Hyunkkyoo Park</i>	
Conceptualization of Defense Industrial Security in Relation to Protecting Defense Technologies . . . . .	158
<i>Heungsoon Park, Heejae Go, and Jonghyeon Hwang</i>	
Secure Cluster-Wise Time Synchronization in IEEE802.15.4e Networks . . . . .	170
<i>Wei Yang, Zhixiang Lai, JuanJuan Zheng, Yugen Yi, and Yuanlong Cao</i>	
Defense Technology Security Education Status . . . . .	183
<i>Hyoung-ryoul Cho</i>	
Multi-lateral Cybersecurity Cooperation for Military Forces in the Digital Transformation Era . . . . .	193
<i>Hyun Kyoo Park, Wootack Lee, Zinkyung Ha, and Namhee Park</i>	
A Study on the Weapon System Software Reliability Prediction and Estimation Process at the Software Development Phase . . . . .	205
<i>In Soo Ryu and Suk Jae Jeong</i>	
Decentralized Message Broker Federation Architecture with Multiple DHT Rings for High Survivability . . . . .	218
<i>Minsub Kim, Minho Bae, Sangho Yeo, Gyudong Park, and Sangyoon Oh</i>	
Method to Judge the Coupling State of the Resonator in the Q-Factor Measurement . . . . .	227
<i>Hai Zhang</i>	
An Efficient Transmission Approach for Information-Centric Based Wireless Body Area Networks . . . . .	236
<i>Longzhe Han, Yi Bu, Xin Song, and Jia Zhao</i>	
Efficiencies in Binary Elliptic Curves . . . . .	246
<i>Scott T. E. Hirschfeld, Lynn M. Batten, and Mohammed K. I. Amain</i>	

**Workshop Geomatics for Resource Monitoring  
and Control (GRMC 2018)**

A Low Cost Methodology for Multispectral Image Classification . . . . .	263
<i>Michele Mangiameli, Giuseppe Mussumeci, and Alessio Candiano</i>	
Low-Altitude UAV-Borne Remote Sensing in Dunes Environment: Shoreline Monitoring and Coastal Resilience . . . . .	281
<i>Gabriella Caroti, Andrea Piemonte, and Yari Pieracci</i>	
Calibration of CLAIR Model by Means of Sentinel-2 LAI Data for Analysing Wheat Crops Through Landsat-8 Surface Reflectance Data . . . . .	294
<i>Giuseppe Peschecchia and Umberto Fratino</i>	
Multi-image 3D Reconstruction: A Photogrammetric and Structure from Motion Comparative Analysis . . . . .	305
<i>Grazia Caradonna, Eufemia Tarantino, Marco Scaioni, and Benedetto Figorito</i>	
Investigation of a Flood Event Occurred on Lama Balice, in the Context of Hazard Map Evaluation in Karstic-Ephemeral Streams . . . . .	317
<i>Vito Iacobellis, Audrey M. N. Martellotta, Andrea Gioia, Davide Prato, Vincenzo Totaro, Rocco Bonelli, Gabriella Balacco, and Alisa A. M. G. Esposito</i>	
Flood Susceptibility Evaluation on Ephemeral Streams of Southern Italy: A Case Study of Lama Balice . . . . .	334
<i>Andrea Gioia, Vincenzo Totaro, Rocco Bonelli, Alisa A. M. G. Esposito, Gabriella Balacco, and Vito Iacobellis</i>	
Static and Kinematic Surveys Using GNSS Multi-constellation Receivers and GPS, GLONASS and Galileo Data . . . . .	349
<i>Raffaela Cefalo, Antonio Novelli, Tatiana Sluga, Paolo Snider, Eufemia Tarantino, and Agostino Tommasi</i>	
Geometric Accuracy Evaluation of Geospatial Data Using Low-Cost Sensors on Small UAVs . . . . .	364
<i>Mirko Saponaro, Eufemia Tarantino, and Umberto Fratino</i>	
Fire Risk Estimation at Different Scales of Observations: An Overview of Satellite Based Methods . . . . .	375
<i>Rosa Lasaponara, Angelo Aromando, Gianfranco Cardettini, and Monica Proto</i>	

**8th International Symposium on Software Quality (ISSQ 2018)**

Developer Focus: Lack of Impact on Maintainability . . . . .	391
<i>Csaba Faragó and Péter Hegedűs</i>	
Software Reliability Assessment Using Machine Learning Technique . . . . .	403
<i>Ranjan Kumar Behera, Suyash Shukla, Santanu Kumar Rath, and Sanjay Misra</i>	
Quantitative Quality Assessment of Open Source Software by Considering New Features and Feature Improvements . . . . .	412
<i>Kamlesh Kumar Raghuvanshi, Meera Sharma, Abhishek Tandon, and V. B. Singh</i>	
A Framework for Quality Measurement of BPMN Process Models . . . . .	424
<i>Anacleto Correia, António Gonçalves, and Mário Simões-Marques</i>	
Feature Level Complexity and Coupling Analysis in 4GL Systems . . . . .	438
<i>András Kicsi, Viktor Csuvik, László Vidács, Árpád Beszédes, and Tibor Gyimóthy</i>	
A Case Study on Measuring the Size of Microservices . . . . .	454
<i>Hulya Vural, Murat Koyuncu, and Sanjay Misra</i>	
A Hands-on OpenStack Code Refactoring Experience Report . . . . .	464
<i>Gábor Antal, Alex Szarka, and Péter Hegedűs</i>	
Teaching Database Design and Analysis in an Effective Way on Digital Platform and Its Effect on Society . . . . .	481
<i>Uma Maheswari Sadasivam and Chamundeswari Arumugam</i>	
Study of Various Classifiers for Identification and Classification of Non-functional Requirements . . . . .	492
<i>László Tóth and László Vidács</i>	

**Workshop Smart Factory Convergence (SFC 2018)**

A Hybrid Rule-Based and Fuzzy Logic Model to Diagnostic Financial Area for MSMEs . . . . .	507
<i>Germán Méndez Giraldo, Eduyn López-Santana, and Carlos Franco</i>	
A Novel Cloud-Fog Computing Network Architecture for Big-Data Applications in Smart Factory Environments . . . . .	520
<i>Dae Jun Ahn, Jongpil Jeong, and Sunpyo Lee</i>	

**Workshop Theoretical and Computational Chemistry  
and Its Applications (TCCA 2018)**

The ECTN Virtual Education Community Prosumer Model for Promoting and Assessing Chemical Knowledge . . . . .	533
<i>Antonio Lagana, Osvaldo Gervasi, Sergio Tasso, Damiano Perri, and Francesco Franciosa</i>	
A Circular Economy Proposal on CO <sub>2</sub> Reuse to Produce Methane Using Energy from Renewable Sources . . . . .	549
<i>Antonio Lagana and Lorenzo di Giorgio</i>	
Nitrogen Gas on Graphene: Pairwise Interaction Potentials . . . . .	563
<i>Jelle Vekeman, Noelia Faginas-Lago, Inmaculada G. Cuesta, José Sánchez-Marín, and Alfredo Sánchez De Merás</i>	
Confinement of the Pentanitrogen Cation Inside Carbon Nanotubes . . . . .	579
<i>Stefano Battaglia, Stefano Evangelisti, Thierry Leininger, and Noelia Faginas-Lago</i>	
Potential Energy Surface for the Interaction of Helium with the Chiral Molecule Propylene Oxide . . . . .	593
<i>Patricia R. P. Barreto, Alessandra F. Albernaz, Vincenzo Aquilanti, Noelia Faginas-Lago, Gaia Grossi, Andrea Lombardi, Federico Palazzetti, and Fernando Pirani</i>	
First-Principles Molecular Dynamics and Computed Rate Constants for the Series of OH-HX Reactions (X = H or the Halogens): Non-Arrhenius Kinetics, Stereodynamics and Quantum Tunnel . . . . .	605
<i>Nayara D. Coutinho, Vincenzo Aquilanti, Flávio O. Sanches-Neto, Eduardo C. Vaz, and Valter H. Carvalho-Silva</i>	
<b>Workshop Parallel and Distributed Data Mining (WPDM 2018)</b>	
Parallel Mining of Correlated Heavy Hitters . . . . .	627
<i>Marco Pulimeno, Italo Epicoco, Massimo Cafaro, Catiuscia Melle, and Giovanni Aloisio</i>	
An Innovative Framework for Supporting Frequent Pattern Mining Problems in IoT Environments . . . . .	642
<i>Peter Braun, Alfredo Cuzzocrea, Carson K. Leung, Adam G. M. Pazdor, Syed K. Tanbeer, and Giorgio Mario Grasso</i>	
An Innovative Architecture for Supporting Cyber-Physical Security Systems . . . . .	658
<i>Alfredo Cuzzocrea, Massimiliano Nolich, and Walter Ukovich</i>	

**Workshop Sustainability Performance Assessment: Models, Approaches and Applications Toward Interdisciplinary and Integrated Solutions (SPA 2018)**

Integrated SDSS for Environmental Risk Analysis in Sustainable Coastal Area Planning . . . . .	671
<i>Michele Greco, Giovanni Martino, Annibale Guariglia, Lucia Trivigno, Vito Sansanelli, Angela Losurdo, and Giovanni Mussuto</i>	
A Review of Residential Water Consumption Determinants . . . . .	685
<i>Nguyen Bich-Ngoc and Jacques Teller</i>	
Carbon Stock as an Indicator for the Estimation of Anthropic Pressure on Territorial Components . . . . .	697
<i>Arianna Mazzariello, Angela Pilogallo, Francesco Scorza, Beniamino Murgante, and Giuseppe Las Casas</i>	
Tourism Attractiveness: Main Components for a Spacial Appraisal of Major Destinations According with Ecosystem Services Approach . . . . .	712
<i>Angela Pilogallo, Lucia Saganeiti, Francesco Scorza, and Giuseppe Las Casas</i>	
Using Open Data and Open Tools in Defining Strategies for the Enhancement of Basilicata Region . . . . .	725
<i>Raffaella Carbone, Giovanni Fortunato, Giovanna Pace, Emanuele Pastore, Luciana Pietragalla, Lydia Postiglione, and Francesco Scorza</i>	
From the UN New Urban Agenda to the Local Experiences of Urban Development: The Case of Potenza . . . . .	734
<i>Giuseppe Las Casas and Francesco Scorza</i>	
The Role of Intermediate Territories for New Sustainable Planning and Governance Approaches. Criteria and Requirements for Determining Multi-municipal Dimension: South Italy Case . . . . .	744
<i>Piergiuseppe Pontrandolfi and Antonella Cartolano</i>	
Investigating Good Practices for Low Carbon Development Perspectives in Basilicata . . . . .	763
<i>Alessandro Attolico, Rosalia Smaldone, Francesco Scorza, Emanuela De Marco, and Angela Pilogallo</i>	
<b>Author Index</b> . . . . .	777