

**The International Conference
on Computational Science and its Applications**

July 1–4, 2019

Conference Program

July 1st, 2019

08:00–18:00	Registration								
08:30–09:00	<i>Opening Ceremony</i> FIRST FLOOR ROOM №3								
09:00–10:00	Stefano Evangelisti: <i>Clifford Boundary Conditions for Periodic Systems</i> FIRST FLOOR ROOM №3								
10:00–10:20	Coffee Break								
10:20–12:00	GeogAnMod-1	SEPA-1	SEPA-2	BDLTA-1	GenTrack-1	GenTrack-2	BIONCA+CAMSA	COA-1	
12:00–14:00	Lunch								
14:00–15:40	GeogAnMod-2	SEPA-3	TTSDP-1	BDLTA-2	GenTrack-3	GenTrack-4	CAMSA	COA+ML-SEOD	
15:40–16:00	Coffee Break								
16:00–17:40	GeogAnMod-3	SEPA-4	TTSDP-2	BDLTA-3	GenTrack-5	GenTrack-6	AAFTW TETDT+ASTER	CAS-1	
18:00–22:00	<i>Welcome reception</i>								

July 2nd, 2019

08:00–18:00	Registration								
09:00–10:00	Nadia Nedjah: <i>Swarm Robotics: Towards Standardization</i> FIRST FLOOR ROOM №3								
10:00–10:20	Coffee Break								
10:20–12:00	CTP	SEPA-5	TTSDP-3	SCI-1	GenTrack-7	GenTrack-8	AAILT	CAS-1	
12:00–14:00	Lunch								
14:00–15:40	Smart_Cities	SEPA-6	ISSQ-1	SCI-2	GenTrack-9	GenTrack-10	ACER-EMOR E-WCES	A2TM-1	
15:40–16:00	Coffee Break								
16:00–17:40	EMEU E	SEPA-7	ISSQ-2	SCI-3	GenTrack-11	GenTrack-12	SecoD B	A2TM-2	

July 3rd, 2019

08:00–18:00	Registration							
09:00–10:00	<p align="center">Eligius M.T. Hendrix: <i>On computational challenges in inventory control</i> FIRST FLOOR ROOM №3</p>							
10:00–10:20	Coffee Break							
10:20–12:00	GRMC	SEPA-8	ISSQ-3	SCI-4	GenTrack-13	GenTrack-14	FISTA+VRA	CompAstro-TCMMA
12:00–14:00	Lunch							
14:00–15:40	SPA-Smart_Water	SEPA-9	ISSQ-4	-	QuaCheSol	SFC	CMSI M-1	TCCMA
15:40–16:00	Coffee Break							
16:00–17:40	SPA-EMEUE	SEPA-10	ISSQ-5	-	QuaCheSol	SFC+MSA4CPS	CMSI M-WPDM	-
19:00–23:00	Gala Dinner							

July 4th, 2019

08:00–18:00	Registration							
09:00–10:00	<p align="center">Rosa Lasaponara: <i>Analysis, integration and interpretation of Big Earth data in the Copernicus Era</i> FIRST FLOOR ROOM №3</p>							
10:00–10:20	Coffee Break							
10:20–10:50	Closing Ceremony							
11:00–19:00	Conference Tour to Peterhof Palace and Gardens							

Sessions' detailed program

Session: GeogAnMod-1

Chair: Hartmut Asche (University of Potsdam)

July 1, 2019

THIRD FLOOR ROOM №56

Time	Authors	Title
10:20	Piotr Werner, and Mariusz Porczek	Spatial Patterns of Development of Mobile Technologies for 5G networks
10:40	Paolino Di Felice	Metrics to Rank Illegal Buildings
11:00	Vedran Kasalica, and Anna-Lena Lamprecht	Workflow Discovery through Semantic Constraints: A Geovisualization Case Study
11:20	Clarice Bleil de Souza, Ilya V. Dunichkin, and Camilla Pezzica	A user-centred approach to design Transport Interchange Hubs (TIH): A discussion illustrated by a case study in the Russian Arctic
11:40	Ilya Dunichkin, Clarice Bleil de Souza, Konstantin Bogachev, and Camilla Pezzica	Exploring specific features of Transport Interchange Hubs (TIH) design, taking into account the climatic conditions of the Russian Arctic

Session: SEPA-1

Chair: Adam Galuszka (Silesian University of Technology)

July 1, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
10:20	Itamir de Moraes Barroca Filho, Silvio Sampaio, Rafael Queiroz, Dannylo Egidio, Ramon Malaquias, and Larissa Moura	A Microservice-Based Health Information System for Student-Run Clinics.
10:40	Ademir Almeida da Costa Júnior, Sanjay Misra, and Michel S. Soares	A Systematic Mapping Study on Software Architectures Description based on ISO/IEC/IEEE 42010:2011
11:00	Ademir Almeida da Costa Júnior, Sanjay Misra, and Michel S. Soares	ArchCaMO - A Maturity Model for Software Architecture Description based on ISO/IEC/IEEE 42010:2011

11:20	Manoela R. Oliveira, Felipe J. R. Vieira, Sanjay Misra, and Michel S. Soares	A Survey on the Skills, Activities and Role of the Software Architect in Brazil
11:40	Felipe J. R. Vieira, Manoela R. Oliveira, Rogerio P. C. do Nascimento, and Michel S. Soares	Technical and Managerial Difficulties in Postmortem Analysis in Software Projects

Session: SEPA-2

Chair: Ravin Ahuja (Shri Vishwakarma Skill University)

July 1, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
10:20	Peter Nkomo, and Marijke Coetzee	Software Development Activities for Secure Microservices
10:40	Paulo Meirelles, Carla Rocha, Felipe Assis, Rodrigo Siqueira, and Alfredo Goldman	A Students' Perspective of Native and Cross-Platform approaches for Mobile Application Development
11:00	Sebastian Student, Alicja Płuciennik, Krzysztof Łakomicz, Agata Wilk, Wojciech Benz, and Krzysztof Fujarewicz	Integration strategies of cross-platform microarray data sets in multi class classification problem
11:20	Oluwafemi Osho, Uthman L. Mohammed, Nanfa N. Nimzing, Andres A. Uduimoh, and Sanjay Misra	Forensic Analysis of Android Mobile Banking Apps
11:40	Quoc Trung Pham, Sanjay Misra, and Le Ngoc Huyen Huynh	Investigating Enterprise Resource Planning (ERP) effect on Work environment

Session: BDLTA-1

Chair: Vladimir Khorkov (Saint-Petersburg State University)

July 1, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
10:20	Alexander Bogdanov, Alexei Uteshev, and Valery Khvatov	Error detection in the decentralized voting protocol

10:40	Nikita Storublevtcev	Cryptography in Blockchain
11:00	Nataliia Kulabukhova, Andrei Ivashchenko, Iurii Tipikin, and Igor Minin	Self-Sovereign Identity for IoT Devices
11:20	Dmitry Arsenjev, Dmitry Baskakov, and Vyacheslav Shkodyrev	Distributed Ledger Technology and Cyber-Physical Systems. Multi-Agent Systems. Concepts and trends.
11:40	Viktor Dostov, Pavel Shust, and Elizaveta Popova	Using mathematical models to describe the dynamics of the spread of traditional and cryptocurrency payment systems

Session: GenTrack-1

Chair: Marcos Quiles (Federal University of Sao Paulo)

July 1, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
10:20	S. L. Gonzaga de Oliveira, A. A. A. M. Abreu, C. Osthoff, and L. N. Henderson Guedes de Oliveira	A variant of the George-Liu algorithm
10:40	Guenter Baerwolff, and Julia Baumbach	Numerical solution of nonlinear cross diffusion problems
11:00	S. L. Gonzaga de Oliveira, C. Osthoff, and L. N. Henderson Guedes de Oliveira	An experimental analysis of heuristics for profile reduction
11:20	Alexander Matrosov	Computational Peculiarities of the Method of Initial Functions
11:40	Sandy Porto, and Marcos Quiles	Clustering Data Streams: A complex network approach

Session: GenTrack-2

Chair: Rafael Santos (INPE-National Institute for Space Research)

July 1, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
10:20	Tatiana Penkova, and Anna Metus	Method of Comprehensive Estimation of Natural and Anthropogenic Territory Safety (the Case of Krasnoyarsk Region)
10:40	Tatiana Penkova, and Anna Korobko	Investigation of the hydraulic unit operation features based on vibration system data mining
11:00	Kittisak Kerdprasop, Nittaya Kerdprasop, Kacha Chansilp, and Paradee Chuaybamroong	The Use of Spaceborne and Oceanic Sensors to Model Dengue Incidence in the Outbreak Surveillance System
11:20	Nittaya Kerdprasop, Kacha Chansilp, Kittisak Kerdprasop, and Paradee Chuaybamroong	Anomaly Detection with Machine Learning Technique to Support Smart Logistics
11:40	Edna Dias Canedo, Heloise Acco Tives Leão , Rhandy Rafael de Carvalho, Ruyther Parente da Costa, Giovanni Almeida Santos, and Marcio Vinicius Okimoto	Educational Data Mining: A Profile Analysis of Brazilian Students

Session: BIONCA+CAMSA

Chair: Nadia Nedjah (State University of Rio de Janeiro)

July 1, 2019

FOURTH FLOOR ROOM №78

Time	Authors	Title
10:20	Yuri Marchetti Tavares, Nadia Nedjah, and Luiza de Macedo Mourelle	Using Neural Networks and Hough Transform for Leukocytes Differentiation in Blood Count Images

10:40	Maamar Bougherara, Nadia Nedjah, Djamel Bennouar, Rebiha Kemcha, and Luiza de Macedo Mourelle	Efficient Application Mapping onto Three-Dimensional Network-on-Chips Using Multi-Objective Particle Swarm Optimization
11:00	Rebiha Kemcha, Nadia Nedjah, Amin Riad Maouche, and Maamar Bougherara	Evolutionary design of Approximate Sequential Circuits at RTL using Particle Swarm Optimization
11:20	Sanskriti Gupta, and Rekha Vig	Machine Learning Models for Depressed Patient Classification using fMRI: A Study
11:40	Carlos Andrés Collazos Morales	Detection of Faults in an Osmotic Dehydration Process through State Estimation and Interval Analysis.

Session: COA-1

Chair: Ana Rocha (University of Minho, Portugal)

July 1, 2019

FOURTH FLOOR ROOM N^o80

Time	Authors	Title
10:20	Joana Dias, and Humberto Rocha	Forecasting Wheat Prices based on Past Behavior: comparison of different modelling approaches
10:40	Maria do Céu Marques, and Joana Dias	Dynamic Facility Location Problem with Stochastic Setup Times
11:00	Humberto Rocha, Joana Dias, Tiago Ventura, Brígida Ferreira, and Maria do Carmo Lopes	An Optimization Approach For Noncoplanar Intensity-Modulated Arc Therapy Trajectories
11:20	Edmar Hell Kampke, Leonardo Moreli Scheideger, Geraldo Regis Mauri, and Maria Claudia Silva Boeres	A Network Flow based Construction for a GRASP+SA Algorithm to Solve the University Timetabling Problem
11:40	Mahdi Moeini	Orthogonal Bandit Learning for Portfolio Selection under Cardinality Constraint

Session: GeogAnMod-2
Chair: Ivan Blečić (University of Cagliari)
July 1, 2019
THIRD FLOOR ROOM №56

Time	Authors	Title
14:00	Henning Sten Hansen	Cumulative impact of societal activities on marine ecosystems and their services
14:20	Vladimir Alarcon	Predicting Sediment Concentrations Using a Nonlinear Autoregressive Exogenous Neural Network
14:40	Valentina Santarsiero, Gabriele Nolè, Antonio Lanorte, Biagio Tucci, Pasquale Baldantoni, and Beniamino Murgante	Evolution of Soil Consumption in the Municipality of Melfi (Southern Italy) in Relation to Renewable Energy.
15:00	Ivan Blečić, Ana Clara Moura, Alessandra Guimarães, and Giuseppe A. Trunfio	Multi-Criteria Evaluation vs Perceived Urban Quality: An Exploratory Comparison
15:20	Vladimir Alarcon	Using Gridded Multi-mission Sea Surface Height Data to Estimate Tidal Heights at Columbia River Estuary

Session: SEPA-3
Chair: JeongAh Kim (Catholic Kwandong University)
July 1, 2019
THIRD FLOOR ROOM №57

Time	Authors	Title
14:00	Syeda Sumbul Hossain, S A M Jubayer, Shadikur Rahman, Dr. Touhid Bhuiyan, Lamisha Rawshan, and Saiful Islam	Customer Feedback Prioritization Technique: A Case Study on Lean Startup
14:20	JeongAh kim, and HeeJun Kim	Meta-analysis of Researches of STEAM with coding education – in Korea
14:40	Jeong Ah kim, and DongGi Kim	Component Architecture of mHealth Service Platform

15:00	Petr Sosnin, Sergey Shumilov, and Aleksandr Ivasev	An Architectural Approach to the Precedent-Oriented Solution of Tasks in Designing a Software Intensive System
15:20	Camilo Vásquez, Broderick Crawford, Ricardo Soto, José Lemus-Romani, Gino Astoga, and Sanjay Misra	Galactic Swarm Optimization Applied to Reinforcement of Bridges by Conversion in Cable-Stayed Arch

Session: TTSDP-1

Chair: Ravin Ahuja (Shri Vishwakarma Skill University)

July 1, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
14:00	Jessica Castro, Luiz Lima, Eudisley Anjos, Fernando Matos, and Iury Araujo	Using Policy Refinement to Assist IoT Device Management in Smart Hospitals
14:20	Absalom Ezugwu, Rossane Els, Jean Fonou-Dombeu, Duane Naido, and Kimone Pillay	Parallel Symbiotic Organisms Search Algorithm
14:40	Absalom Ezugwu, and Bradley Pillay	Hybrid Artificial Neural Networks-Symbiotic Organisms Search Algorithm for Stock Price Prediction
15:00	Abdelaziz Elfadaly , Beniamino Murgante , Mohamad Molaei Qelichi , Rosa Lasaponara , and Ali Hosseini	A comparative analysis of temporal changes in urban land use resorting to advanced remote sensing and GIS in Karaj, Iran and Luxor, Egypt
15:20	Emmanuel Okewu, Phillip Adewole, and Oladipupo Sennaiké	Experimental Comparison of Stochastic Optimizers in Deep Learning

Session: BDLTA-2

Chair: Vladimir Khorkov (Saint-Petersburg State University)

July 1, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
14:00	Ildar Khamitov, Victor Dostov, and Pavel Shoust	Secret Voting: Knowledge vs Trust

14:20	Denis Kirillov, Vladimir Korkhov, Vadim Petrunin, Mikhail Makarov, Ildar M. Khamitov, and Victor Dostov	Implementation of an e-voting scheme using Hyperledger Fabric permissioned blockchain
14:40	Denis Kirillov, Oleg Iakushkin, Vladimir Korkhov, and Vadim Petrunin	Evaluation of tools for analyzing smart contracts in distributed ledger technologies
15:00	Anna Fatkina, Oleg Iakushkin, Vladimir Korkhov, and Dmitry Selivanov	Methods of formal software verification in the context of distributed systems
15:20	Oleg Iakushkin, Dmitry Selivanov, Ekaterina Pavlova , and Vladimir Korkhov	Architecture of a smart container using Blockchain technology

Session: GenTrack-3

Chair: Osvaldo Gervasi (University of Perugia)

July 1, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
14:00	Carlos Andrés Collazos Morales	Normalized Gain and Least Squares to Measure of the Effectiveness of a Physics Course
14:20	Carlos Andrés Collazos Morales	A model to study the strange quark $s - s^-$ asymmetry in nucleon sea
14:40	Alexey S. Eremin, Nikolai A. Kovrizhnykh, and Igor V. Olemskoy	Economical sixth order method for systems of ordinary differential equations
15:00	Mattia D'Emidio, and Imran Khan	Dynamic Public Transit Labeling
15:20	Osvaldo Gervasi, Riccardo Magni, Martina Fortunelli, Damiano Perri, and Marco Simonetti	Mobile Localization Techniques Oriented to Tangible Web

Session: GenTrack-4

Chair: Stefano Faralli (University of Rome Unitelma Sapienza)

July 1, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
14:00	Silvia Calegari, Matteo Dominoni, Paolo Avogadro, and Floriana Meluso	The Pollicina Project: a Social Learning Management System to Create Personalized Cultural Itineraries
14:20	Heloise Leão, Edna Canedo, Pedro Costa, Marcio Okimoto, and Giovanni Almeida	Use of AHP and Promethee for Research Project Portfolio Selection
14:40	Damiano Distante, and Stefano Faralli	A two-phase bug localization approach based on multi-layer perceptrons and distributional features
15:00	Nadezhda Yarushkina, Aleksey Filippov, and Vadim Moshkin	Development of a technological platform for knowledge discovery
15:20	Vadim Moshkin, Ilya Andreev, Nadezhda Yarushkina, and Irina Moshkina	Integration of Fuzzy OWL ontologies and Fuzzy time series in the determination of faulty technical units

Session: CAMSA

Chair: Jie Shen (University of Michigan)

July 1, 2019

FOURTH FLOOR ROOM №78

Time	Authors	Title
14:00	Carlos Andrés Collazos Morales	Security-State Estimation of Electrical Power Systems: a Methodological Proposal
14:20	Carlos Andrés Collazos Morales	Robust Control of an Evaporator through Algebraic Riccati Equations and D-K Iteration.
14:40	Marina Dioto, Eduardo Rohde Eras, and Valdivino Alexandre de Santiago Júnior	On the Feasibility of Probabilistic Model Checking to Analyze Battery Sustained Power Supply Systems
15:00	Carlos Andrés Collazos Morales	A Telemedicine System using Petri Nets

15:20	Morteza Modarresi Asem, and Vala Mehryar Alviri	Particle Charging Using Ultra-Short Pulse Laser in the Ideal Maxwellian Cold Plasma for Cancer Treatment Based on Hadron Therapy
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Session: COA+ML-SEOD

Chair: Humberto Rocha (University of Coimbra)

July 1, 2019

FOURTH FLOOR ROOM №80

Time	Authors	Title
14:00	Eligius M.T. Hendrix, Ana Maria A.C. Rocha, and Inmaculada García	On trajectory optimization of an electric vehicle
14:20	Mariana Matos, Ana Maria Rocha, Lino Costa, and Ana I. Pereira	A Multi-objective Approach To Solve The Build Orientation Problem in Additive Manufacturing
14:40	Valéria Romanciuc, and Filipe Alvelos	Optimizing the kidney exchange problem with a budget for simultaneous crossmatch tests
15:00	Mikhaela Aloísia Jéssie Santos Pletsch, Thales Sehn Körting, Willian Vieira Oliveira, Ieda Del' Arco Sanches, Victor Fernandez Velázquez , and Fábio Furlan Gama	Potential of using Sentinel-1 data to distinguish targets in Remote Sensing images
15:20	Olga Oliveira Bittencourt, Fabiano Morelli, Cícero Alves dos Santos Júnior, and Rafael Duarte Coelho dos Santos	Evaluating Classification Models in a Burning Areas' Detection Approach

Session: GeogAnMod-3

Chair: Vladimir Alarcon (Universidad Diego Portales)

July 1, 2019

THIRD FLOOR ROOM №56

Time	Authors	Title
16:00	Pasquale Baldantoni, Gabriele Nolè , Antonio Lanorte , Biagio Tucci, Valentina Santarsiero, and	Trend Definition of Soil Consumption in the Period 1994-2014 - Municipalities of Potenza, Pignola,

	Beniamino Murgante	Melfi and Matera
16:20	Lucia Saganeiti, Angela Pilogallo, Giuseppe Faruolo, Francesco Scorza, and Beniamino Murgante	Energy landscape fragmentation: Basilicata region (Italy) study case
16:40	Angela Pilogallo, Lucia Saganeiti, Francesco Scorza, and Beniamino Murgante	Investigating urban growth dynamic – land surface temperature relationship
17:00	Andreas Fricke, and Hartmut Asche	Geospatial database for the generation of multidimensional virtual city models dedicated to urban analysis and decision-making
17:20	Sarsenbay Abdrakhmanov, Altay Ussenbayev, Ersyn Mukhanbetkalyev , Dina Satybalдина , Ablai Khan Kadyrov , and Nurlan Tashatov	Modeling the Epidemiological Processes of Economically Significant Infections of Animals

Session: SEPA-4

Chair: JeongAh Kim (Catholic Kwandong University)

July 1, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
16:00	James Chaves, and Sergio Freitas	A Systematic Literature Review for Service-oriented Architecture and Agile Development
16:20	Anacleto Correia, Antonio Gonçalves, and Sanjay Misra	Integrating the Scrum Framework and Lean Six Sigma
16:40	Karen Daza, Jorge Hernandez, and Hector Florez	Hardware and Software System for Hydric Estimation and Crop Irrigation Scheduling
17:00	Akande Noah Oluwatobi, Abikoye Oluwakemi Christiana, Adebisi Marion O., Kayode Aderonke Anthonia, Adegun Adekanmi Adeyinka, and Ogundokun Roseline Oluwaseun	Electronic Medical Information Encryption using Modified Blowfish Algorithm
17:20	Adegun Adekanmi Adeyinka, Adebisi Marion O, Akande	A Deep Convolutional Encoder-Decoder Architecture for Retinal Blood

Noah Oluwatobi, Ogundokun Vessels Segmentation
Roseline Oluwaseun, Kayode
Aderonke Anthonia, and Oladele
Tinke O

Session: TTSDP-2

Chair: Ravin Ahuja (Shri Vishwakarma Skill University)

July 1, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
16:00	Tinke Oladele, Roseline Ogundokun, Aderonke Kayode, Adekanmi Adegun, and Marion Adebisi	Application Of Data Mining Algorithms For Feature Selection And Prediction Of Diabetic Retinopathy
16:20	Anacleto Correia, and Antonio Gonçalves	User Experience: a case study for amphibious operations
16:40	Jelili Oyelade, Itunuoluwa Isewon, Olufunke Oladipupo, Zacchaeus Omogbadegun, Onyeka Emebo, and Olufemi Aromolaran	Data Clustering: Algorithms and Its Applications
17:00	Marcelo Leon	From the Geographic Model to Territorial Planning of Santa Elena, Ecuador
17:20	Petr Sosnin	Motivationally Targeted View for Architectural Modeling of Software Intensive Systems

Session: BDLTA-3

Chair: Vladimir Khorkov (Saint-Petersburg State University)

July 1, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
16:00	Oleg Iakushkin, Anna Fatkina, Dmitry Selivanov, and Vladimir Korkhov	Analytical Comparison of the Activity of Technological Platforms of Networks
16:20	Alexey Pismerov, Vladislav Popov, Oleg Iakushkin, Vladimir	Electronic examination with distributed ledger technology

	Korkhov, and Anastasia Berlina	
16:40	Daniil Malevanniy, Oleg Iakushkin, and Vladimir Korkhov	Simulation of distributed applications based on containerization technology
17:00	Ivan Podsevalov, Oleg Iakushkin, Ruslan Kurbangaliev, and Vladimir Korkhov	Blockchain as a platform for Fog computing
17:20	Artyom Shurov, Daniil Malevanniy, Oleg Iakushkin, and Vladimir Korkhov	Blockchain network threats: the case of PoW and Ethereum

Session: GenTrack-5

Chair: Vanesa Landero (Universidad Politécnica de Apodaca)

July 1, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
16:00	Ivan Almeida , Regina Celia Paula Leal-Toledo, Elson Toledo, Diego Cacau, Rene Lima, and Sandra Malta	Influence of drivers' behavior on traffic flow at two roads intersection
16:20	Thuy T. Pham, and Eryk Dutkiewicz	Quantify Physiologic Interactions Using Network Analysis
16:40	Vanesa Landero, Joaquín Pérez, Laura Cruz, Tania Turrubiates, and David Ríos	Effects in the Algorithm Performance from Problem Structure, Searching Behavior and Temperature: a causal study case for Threshold Accepting and Bin-Packing
17:00	Carlos H. Lamb, Bruno L. Dalmazo, and Jeferson C. Nobre	Towards the Adaptation of an Active Measurement Protocol for Delay/Disruption-Tolerant Networking
17:20	Manoel F. Ramos, Bruno L. Dalmazo, and Jeferson C. Nobre	A Proposal for IP Spoofing Mitigation at Origin in Homenet Using Software-Defined Networking

Session: GenTrack-6
Chair: Ha Yoon Song (Hongik University)
July 1, 2019
FOURTH FLOOR ROOM №79

Time	Authors	Title
16:00	Polina Proskura, Alexey Zaytsev, and Evgeny Burnaev	Earthquakes precursor based on RTL algorithm with Machine Learning baseline
16:20	Ze Xiang, Ghada El Haddad, and Esmat Aimeur	Privacy Vs. Utility: An Enhanced K-coRated Method
16:40	Kiichi Tago, Kosuke Takagi, and Qun Jin	Polarity classification of tweets considering the poster's emotional change by a combination of Naive Bayes and LSTM
17:00	Ha Yoon Song, and Suchan Hong	Investigating Cyclic Visit of Object Mobility through Time Analysis of Geopositioning Data
17:20	Ha Yoon Song, and Insoo Han	Finding the Best Location for Logistics Hub based on Actual Parcel Delivery Data

Session: AAFTWTETDT+ASTER
Chair: Yeliz Karaca (University of Massachusetts Medical School)
July 1, 2019
FOURTH FLOOR ROOM №78

Time	Authors	Title
16:00	Daniela Moraru, Sanziana Istrate, Cecilia Eniceicu, and Paul Sterian	Computational Methods for OCT Images Analyze Provided Within Diabetic Retinopathy
16:20	Yeliz Karaca, Majaz Moonis, and Yu-Dong Zhang	MS Subgroup Classification by Multifractal Denosing Method and K-Means Algorithm
16:40	Yeliz Karaca, and Carlo Cattani	Singularity Classification for Finance Data by Hölder Regularity Functions
17:00	Roberto De Lotto, Caterina	Risk analysis: a focus on Urban

	Pietra, and Elisabetta Venco	Exposure estimation
17:20	Monica Sebillo, Giuliana Vitiello, Michele Grimaldi, and Dimitri Dello Buono	SAFE (Safety for Families in Emergency). A citizen-centric approach for risk management

Session: CAS-1

Chair: Ana Cristina Braga (University of Minho, Portugal)

July 1, 2019

FOURTH FLOOR ROOM N°80

Time	Authors	Title
16:00	Cláudia Santos, Isabel Pereira, and Manuel Scotto	Periodic INAR(1) Models with Skellam-distributed Innovations
16:20	Juliana Cardoso Silva, Manuel Carlos Figueiredo, and Ana Cristina Braga	Demand Forecasting: A Case Study in the Food Industry
16:40	Bambang Suprihatin, Endro Setyo Cahyono, and Novi Rustiana Dewi	Asymptotic Distribution of the Bootstrap Parameter Estimator of an AR(p) Model
17:00	Flavia Barbosa, Sérgio Sousa, Senhorinha Teixeira, and José Carlos Teixeira	Application of DOE for the Study of a Multiple Jet Impingement System
17:20	Maria Eugenia Ferrao, and Paula Prata	Computing Topics on Multiple Imputation in Big Identifiable Data Using R: An application to Educational Research

Session: CTP*Chair: Chiara Garau (University of Cagliari)***July 2, 2019****THIRD FLOOR ROOM №56**

Time	Authors	Title
10:20	Lucas Frank, Yan Ferreira, Bruno Dembogurski, Francisco Henrique, Eduardo Pagani, and Edelberto Franco Silva	Multilayer Perceptron and Particle Swarm Optimization Applied to Traffic Flow Prediction on Smart Cities
10:40	Andreas Koch	A Simulation Model Perspective on Social Capital
11:00	Valerio di Pinto, Valerio Cutini, Francesco Rossini, and Antonio Rinaldi	Informal Settlements Spatial Analysis using Space Syntax and Geographic Information Systems
11:20	Galina Tibilova, Andrey Ovcharenko, Elena Stankova, and Natalya Dyachenko	The electronic government of St.-Petersburg as relevant experience of construction of digital economy
11:40	Ljiljana Živković, and Blaž Barborič	CO-TAMP: transnational platform for territorial attractiveness monitoring in the Danube region

Session: SEPA-5*Chair: JeongAh Kim (Catholic Kwandong University)***July 2, 2019****THIRD FLOOR ROOM №57**

Time	Authors	Title
10:20	Sangjin Nam, Suntae Kim, Jung-Hoon Shin, Jeong Ah Kim, and Sooyong Park	Context Data Preprocessing for Context-Aware Smartphone Authentication
10:40	Itamir Barroca Filho, Gibeon Aquino, and Thais Batista	Instantiating a Software Reference Architecture for IoT-based Healthcare Applications
11:00	Victor Alagbe, Segun Popoola, Aderemi Atayero, Bamidele Adebisi, Robert Abolade, and Sanjay Misra	Artificial Intelligence Techniques for Electrical Load Forecasting in Smart and Connected Communities

11:20	Marion Adebisi, Bolaji Famuyiwa, Abayomi Mosaku, Roseline Ogundokun, Olaolu Arowolo, and Noah Akande	Computational Investigation of Consistency and Performance of the Biochemical Network of the Malaria Parasite, Plasmodium falciparum
11:40	Jordan McDonald, and Des Greer	Investigating Evolution in Open Source Software

Session: TTSDP-3

Chair: Petr Sosnin(Ulyanovsk State Technical University)

July 2, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
10:20	Ravish Kumar Sharma, and Goldie Gabrani	Exploring Deep Learning Methods for Particle Track Reconstruction
10:40	Syed Hassan Askari, Shahrukh Ali Khan, Imran Khalil, Muhammad Haris, and Muhammad Shoaib	Pattern Based Model Reuse Using Colored Petri Nets
11:00	Abdul Razaque, Nurbek Tastan, Dias Dyussebek, Dinmukhamed Sanatuly, Fathi Amsaad, and Amanzholova Saule Toksanovna	Burglary Detection Framework for House crime Control
11:20	dante carrizo, Andres Alfaro, and John Castro	Critical Aspects of the Software Industry in Chile: Results from an Empirical Study
11:40	Rabin Bhandari , and Ricardo Colomo-Palacios	Holacracy In Software Development Teams: A Multivocal Literature Review

Session: SCI-1

Chair: Elena Stankova (Saint-Petersburg State University)

July 2, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
10:20	Alexander Degtyarev, Vasily Khramushin, Ivan Gankevich, Ivan Petriakov, Anton Gavrikov, and Artemii Grigorev	Virtual testbed: Ship motion simulation for personal workstations
10:40	Guilherme R. Preto, Bruno L. Dalmazo, Jonatas A. Marques, Vladimir Korkhov, Philippe O. A. Navaux, and Luciano P. Gaspary	Boosting HPC Applications in the Cloud through JIT Traffic-Aware Path Provisioning
11:00	Ruslan Kuchumov, and Vladimir Korkhov	Fair resource allocation for running HPC workloads simultaneously.
11:20	Aleksei Beloshapko, Vladimir Korkhov, Christian Knoll, and Uwe Iben	Industrial Fisheye Image Segmentation Using Neural Networks
11:40	Alexander Degtyarev, Ivan Gankevich, Anton Gavrikov, Artemii Grigorev, Vasily Khramushin, and Ivan Petriakov	Vessel: Efficient plain text file format for ship hull geometry

Session: GenTrack-7

Chair: Sevin Gumgum (Izmir University of Economics)

July 2, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
10:20	Tushaar Gangavarapu, Himadri Pal, Pratyush Prakash, Suraj Hegde, and Geetha V	Parallel OpenMP and CUDA Implementations of the N-Body Problem

10:40	Lounis Abbas, Louadj Kahina, Marthon Philippe, Abdelkrim Nemra, and Aidene Mohamed	Minimizing the energy of a quad rotorin free final time using Bocop software
11:00	Louadj Kahina, Philippe Marthon, and Nemra Abdelkrim	Modeling an optimal control problem for the navigation of mobile robots in an occluded environment Application to unmanned aerial vehicles
11:20	Sevin Gumgum	Numerical Solutions of Nonlinear Delay Differential Equations by Legendre Wavelets
11:40	Hemerson Tacon, André S. Brito, Hugo L. Chaves, Marcelo Bernardes Vieira, Saulo Moraes Villela, and Helena de Almeida Maia	Human Action Recognition Using Convolutional Neural Networks with Symmetric Time Extension of Visual Rhythms

Session: GenTrack-8

Chair: Sergio Tasso (University of Perugia)

July 2, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
10:20	Thiago Silva, Marco Winckler, and Hallvard Trætteberg	Ensuring the Consistency between User Requirements and Graphical User Interfaces: A Behavior-Based Automated Approach
10:40	Yan Ferreira, Lucas Frank, Bruno Dembogurski, Francisco Henrique, Eduardo Pagani, and Edelberto Franco	Applying a Multilayer Perceptron for Traffic Flow Prediction to Empower a Smart Ecosystem
11:00	Giulio Biondi, Valentina Franzoni, Osvaldo Gervasi, and Damiano Perri	An Approach for Improving Automatic Mouth Emotion Recognition
11:20	Damiano Perri, Paolo Sylos Labini, Osvaldo Gervasi, Sergio Tasso, and Flavio Vella	Towards a learning-based performance modeling for accelerating Deep Neural Networks
11:40	Maxim Menshikov	Equid - a static analysis framework for industrial applications

Session: AAILT

Chair: Alfredo Milani (University of Perugia)

July 2, 2019

FOURTH FLOOR ROOM №78

Time	Authors	Title
10:20	Sergio Tasso, Osvaldo Gervasi, Anna Locchi, and Flavio Sabbatini	Hahai: computational thinking in primary schools
10:40	Bruno Fanini, and Luigi Cinque	An image-based encoding to record and track immersive VR sessions
11:00	Nikki Kuang	Leveraging Reinforcement Learning Techniques for Effective Policy Adoption and Validation
11:20	Paolo Mengoni, Alfredo Milani, and Yuanxi Li	Impact of Time Granularity on Histories Binary Correlation Analysis
11:40	Valentina Franzoni, Sergio Tasso, Simonetta Pallottelli, and Damiano Perri	Sharing Linkable Learning Objects with the use of Metadata and a Taxonomy Assistant for Categorization

Session: CAS-1

Chair: Ana Cristina Braga (University of Minho, Portugal)

July 2, 2019

FOURTH FLOOR ROOM №80

Time	Authors	Title
10:20	Daniel Moreira, and Ana Cristina Braga	Comparing Empirical ROC Curves Using a Java Application: CERCUS
10:40	Isabel Dimas, Teresa Rebelo, Paulo Renato Lourenço, and Humberto Rocha	A Nonlinear Dynamical System Perspective On Team Learning: The Role Of Team Culture And Social Cohesion
11:00	Sandra Aleixo, and Júlia Teles	Weighted Coefficients to Measure Agreement among Several Sets of Ranks Emphasizing Top and Bottom Ranks at the Same Time
11:20	Giulio Biondi, Valentina Franzoni, Osvaldo Gervasi, and Damiano Perri	An Approach for Improving Automatic Mouth Emotion Recognition

Session: Smart_Cities

Chair: Ljiljana Zivkovic (Ministry of Construction, Transport and Infrastructure, Serbia)

July 2, 2019

THIRD FLOOR ROOM №56

Time	Authors	Title
14:00	Giulia Desogus, Pasquale Mistretta, and Chiara Garau	Smart Islands: A Systematic Review on Urban Policies and Smart Governance
14:20	Chiara Garau, Alfonso Annunziata, and David Vale	Smart city governance and children's rights: perspectives and findings from literature on natural elements influencing children's activities within public spaces
14:40	Igor Ryabchikov, Nikolay Teslya, and Evgeniy Lipkin	The concept of the deviant behavior detection system via surveillance cameras
15:00	Caterina Caprioli, Marta Bottero, and Marialisa Pellegrini	An Agent-Based Model (ABM) for the evaluation of energy redevelopment interventions at district scale: an application for the San Salvario neighborhood in Turin (Italy)

Session: SEPA-6

Chair: JeongAh Kim (Catholic Kwandong University)

July 2, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
14:00	Adedeji Afolabi, Emmanuel Eshofonie, and Faith Akinbo	Development of an Alumni Feedback system for Curriculum Improvement in Building Technology Courses
14:20	Adedeji Afolabi, Ibukun Afolabi, Emmanuel Eshofonie, and Faith Akinbo	e-Maintenance Framework for Strategic Asset Management in Tertiary Institutions
14:40	Kirill Sviatov, Alexander Miheev, Daniil Kanin, Sergey Sukhov, and Vadim Tronin	Scenes segmentation in self-driving car navigation system using neural network models with attention
15:00	Thais A. Baldissera, and Luis M. Camarinha-Matos	Evolutionary and Adaptive Elderly Care Ecosystem

15:20	Ma. Susana Flores, Claudia Torrero, Everardo Torrero, Lamia Handam, and Silvana Flores	Software Engineering Methodologies for the Evaluation and Monitoring of Projects of Higher Education Students
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Session: ISSQ-1

Chair: Des Greer (Queen's University Belfast)

July 2, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
14:00	Jitao Yang	Personalized Nutrition Solution based on Nutrigenomics
14:20	Bibek Acharya, and Ricardo Colomo-Palacios	A Systematic Literature Review on Autonomous agile teams
14:40	Broderick Crawford, Ricardo Soto, and Jose Lemus-Romani	An Adaptive Intelligent Water Drops Algorithm for Set Covering Problem
15:00	Adebayo Abayomi-Alli, Gabriel Ibeh, Modupe Odusami, Olusola Abayomi-Alli, and Sanjay Misra	Long Short-Term Memory Model for Time Series Prediction and Forecast of Solar Radiation and other Weather Parameters
15:20	Zurah Bibi, Jamil Ahmed, Rehan Zafar Paracha , and Amnah S	3D structure determination and validation of mTORC2 using computational modeling techniques

Session: SCI-2

Chair: Elena Stankova (Saint Petersburg State University)

July 2, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
14:00	Elena Stankova, and Evgeny Khvatkov	Using Boosted k-Nearest Neighbour Algorithm for Numerical Forecasting of Dangerous Convective Phenomena
14:20	Alexander Barmasov, Anna Barmasova, Elena Stankova, Mariya Bukina, Dmitriy Lisachenko, and Sofia Vysotskaya	Modern Approach to Creating University Learning Courses: Using Network Ideas for Creating a Hypertext (On Example of Courses on Physics and Concepts of Modern Science)

14:40	Alexander Ebral, and Oleg Iakushkin	Localization of text in photorealistic images
15:00	Oleg Iakushkin , Ruslan Sevostyanov, Alexander Degtyarev, and Pavel Karpiy	Position tracking in 3D space based on a data of a single camera
15:20	Daniil Malevanniy, Oleg Iakushkin, and Olga Sedova	Controlled remote usage of private shared resources via docker and NoVNC

Session: GenTrack-9

Chair: Mattia D'Emidio(University of L'Aquila)

July 2, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
14:00	Lucas Venezian Povoia, Cesar Marcondes, and Hermes Senger	Modeling Energy Consumption based on Resource Utilization
14:20	Marcel Wallschläger, Alexander Acker, and Odej Kao	Silent Consensus: Probabilistic Packet Sampling for Lightweight Network Monitoring
14:40	Man Tianxing, Nataly Zhukova, Vasily Meltsov, and Yulia Shichkina	A Knowledge-based Computational Environment for Real-world Data Processing
15:00	Lukas Gnam, Paul Manstetten, Michael Quell, Karl Rupp, Siegfried Selberherr, and Josef Weinbub	A Flexible Shared-Memory Parallel Mesh Adaptation Framework
15:20	Mattia D'Emidio, and Daniele Frigioni	Distributed Shortest Paths on Power Law Networks in the Generalized Linear Preference Model: an Experimental Study

Session: GenTrack-10

Chair: Nikolay Teslya (SPIIRAS)

July 2, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
14:00	Gaziza Yelibayeva, Assel	Metalanguage and Knowledgebase for

	Mukanova, Altynbek Sharipbay, Altanbek Zulkhazhav , Banu Yergesh, and Gulmira Bekmanova	Kazakh Morphology
14:20	Ildar Baimuratov, Yulia Shichkina, Elena Stankova, Nataly Zhukova, and Nguyen Than	A Bayesian information criterion for unsupervised learning based on an objective prior
14:40	Gulmira Bekmanova , Saltanat Aubakirova, Gaziza Yelibayeva, Altynbek Sharipbay, Rozamgul Niyazova, and Nurgul Dyussupova	Methods for analysing polarity of the Kazakh texts related to the terrorist threats
15:00	Carlos Yasojima, Tamara Ramos, Tiago Araujo, Bianchi Meiguins, Nelson Neto, and Jefferson Morais	Evaluation of Bio-inspired Algorithms in Cluster-Based Kriging Optimization
15:20	Nikolay Teslya, and Sergey Savosin	Matching Ontologies With Word2Vec-based Neural Network

Session: ACER-EMORE-WCES

Chair: Valentina Franzoni (University of Perugia)

July 2, 2019

FOURTH FLOOR ROOM №78

Time	Authors	Title
14:00	Chutisant Kerdvibulvech, and Sheng-Uei Guan	Affective Computing for Enhancing Affective Touch-based Communication through Extended Reality
14:20	Francesca D’Errico, Oliver Niebuhr, and Isabella Poggi	‘Humble voices’ in political communication: a speech analysis across two cultures
14:40	Oliver Niebuhr, and Jan Michalsky	Computer-generated speaker charisma and its effects on human actions in a car-navigation system experiment - Or how Steve Jobs tone of voice can take you anywhere
15:00	Valentina Franzoni, and Alfredo	Emotion Recognition for Self-aid in

	Milani	Addiction Treatment, Psychotherapy, and Nonviolent Communication
15:20	Valentina Franzoni, Yuanxi Li, and Alfredo Milani	Set Semantic Similarity for Image Prosthetic Knowledge Exchange
15:40	Alfredo Milani, Rajdeep Niyogi, and Giulio Biondi	Neural network based approach for learning planning action models

Session: A2TM-1

Chair: Massimiliano Petri (University of Pisa)

July 2, 2019

FOURTH FLOOR ROOM N°80

Time	Authors	Title
14:00	Silvio Nocera, and Francesco Bruzzone	The effectiveness of strategies to reduce external costs from commuting in central Europe
14:20	Marilisa Botte, Luca D'Acerno, and Mariano Gallo	Effects of Rolling Stock Unavailability on the Implementation of Energy-Saving Policies: A Metro System Application
14:40	Maria Grazia Bellizzi, Laura Eboli, and Gabriella Mazzulla	Latent classes exploring the sense of passengers well-being in the terminal: evidence from a peripheral airport
15:00	Vladimir Chebotarev, Boris Davydov, Kseniya Kablukova, and Vadim Gopkalo	Some Features of Formating the Arrival Time Distribution
15:20	Boris Davydov , Vyacheclav Esaulov , Vadim Gopkalo, and Kseniya Kablukova	Basic Framework for Adjusting the Freight Train Schedule

Session: EMEUE

Chair: Carmelo Torre (Politechnic of Bari)

July 2, 2019

THIRD FLOOR ROOM N°56

Time	Authors	Title
16:00	Pierluigi Morano, Francesco Tajani, Maria Rosaria Guarini, Felicia Di Liddo, and Debora Anelli	A multivariate econometric analysis for the forecasting of the interdependences between the housing prices and the socio-economic factors in the city of

		Barcelona (Spain)
16:20	Pierluigi Morano, Maria Rosaria Guarini, Francesco Tajani, Felicia Di Liddo, and Debora Anelli	Incidence of different types of urban green spaces on property prices. A case study in the Flaminio district of Rome (Italy)
16:40	Alessandro Bonifazi, Pasquale Torre, and Carmelo Maria Torre	Social value of nature amenities: WTP for the use of public seaside
17:00	Maria Cerreta, Giuliano Poli, Stefania Regalbuto, and Chiara Mazzarella	A multi-dimensional decision-making process for regenerative landscapes: a new harbour for Naples (Italy)
17:20	Benedetto Manganelli, Mauro De Luca Picione, and Sabina Tataranna	Automatic estimate of depreciated reproduction cost for optimizing the real estate management through BIM

Session: SEPA-7

Chair: JeongAh Kim (Catholic Kwandong University)

July 2, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
16:00	David Akobe, Segun Popoola, Aderemi Atayero, Olasunkanmi Oseni, and Sanjay Misra	A Web Framework for Online Peer Tutoring Application in a Smart Campus
16:20	Faizan Tariq , and Ricardo Colomo-Palacios	Use of Block-Chain Smart Contracts in Software Engineering: A Systematic Mapping
16:40	Ockhyun Paek, Taeho Lee, and Jin-Seok Yang	SPLide: An Integrated Development Environment Supporting Software Product Lines
17:00	Abdoul-Dalibou Abdou, Ndeye Fatou Ngom, Oumar Niang, and Mohamed Cheikh Ould Guera	Analysis of noise perturbation on neural network based ECG classification
17:20	Adebayo Abayomi-Alli, Jeffrey Vipperman, Olusola Abayomi-Alli, Modupe Odusami, and Sanjay Misra	Multi-Class Classification of Impulse and Non-Impulse Sounds Using Deep Convolutional Neural Network (DCNN)

Session: ISSQ-2

Chair: Des Greer (*Queen's University Belfast*)

July 2, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
16:00	Yusuf Mshelia, Simon Apeh, and Edoghogho Olaye	Proposing a Unifying Suite for Software Metrics: An Introduction
16:20	Yusuf Mshelia, and Simon Apeh	Can Software Metrics Be Unified?
16:40	Rishabh Narang, Rinkaj Goyal, and Sanjay Misra	An Empirical Study on the Role of MacroMeso-Micro Measures in Citation Networks
17:00	Ana Lima, Gabriela Fernandes, and Ricardo J. Machado	Tailoring PMI and OGC Portfolio Frameworks
17:20	Béla Vancsics	Graph-based Fault Localization

Session: SCI-3

Chair: Elena Stankova (*Saint-Petersburg State University*)

July 2, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
16:00	Nadezhda Shchegoleva, and Yana Vaulina	Use of digital technology for the attribution of paintings
16:20	Egor Budlov, Oleg Iakushkin, Alexei Uteshev, and Valery Grishkin	Automated creation of unique editable textures for three-dimensional models of archaeological artifacts
16:40	Oleg Iakushkin , Ruslan Sevostyanov, Alexander Degtyarev, Egor Krasilnikov, and Alexey Rusakov	Architecture of the Robot-finder Based on SLAM and Neural Network
17:00	Vasiliy Osipov, Elena Stankova, Alexander Vodyaho, Mikhail Lushnov, Yulia Shichkina, and Nataly Zhukova	Automatic Synthesis of Multilevel Automata Models of Biological Objects
17:20	Alexander Bogdanov	Deep Learning Approach for Prognoses of Long-Term Options Behavior

Session: GenTrack-11

Chair: Michal Smolik(University of West Bohemia)

July 2, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
16:00	Bruno Dembogurski, and Anselmo Montenegro	Adaptive Hierarchical Mesh Detail Mapping and Deformation
16:20	Vladimir Badenko, Kirill Beliayevskiy, Serafim Tammsaar, Alexander Fedotov, and Konstantin Vinogradov	Multithreading in laser scanning data processing
16:40	Thuy T. Pham, M. Takalkar, M Xu, D. T. Hoang, H. A. Truong, and Eryk Dutkiewicz	Airborne Object Detection Using Hyperspectral Imaging: Deep Learning Review
17:00	Martin Cervenka, Michal Smolik, and Vaclav Skala	A new Strategy for Scattered Data Approximation Using Radial Basis Functions Respecting Points of Inflection
17:20	Michal Smolik, and Vaclav Skala	Efficient Simple Large Scattered 3D Vector Fields Radial Basis Functions Approximation Using Space Subdivision

Session: GenTrack-12

Chair: Alfredo Cuzzocrea (University of Trieste)

July 2, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
16:00	Luiz H. Lorena, Marcos G. Quiles, and Luiz A. Lorena	Improving the performance of an integer linear programming community detection algorithm through clique filtering
16:20	Flavio Oquendo	Dealing with Uncertainty in Software Architecture on the Internet-of-Things with Digital Twins
16:40	Alfredo Cuzzocrea, Massimiliano Nolich, and Walter Ukovich	A Big-Data-Analytics System for Supporting Decision Making Processes in Complex Smart-City Applications

17:00	Sara D. Cardell, and Amparo Fúster-Sabater	Binomial characterization of cryptographic sequences
17:20	António Vieira, Luís Dias, Maribel Santos, Guilherme Pereira, and José Oliveira	Supply Chain Simulation in a Big Data Context: Risks and Uncertainty Analysis

Session: SecoB

Chair: Senhorinha Teixeira (University of Minho)

July 2, 2019

FOURTH FLOOR ROOM N^o78

Time	Authors	Title
16:00	Javier Urquizo, Carlos Calderon, and Philip James	Engineering modelling of building energy consumption in cities: Identifying key variables and their interactions with the built environment.
16:20	Ana Cristina Ferreira, Ângela Silva, and Senhorinha Teixeira	Multi-objective Optimization of Solar Thermal Systems applied to Residential Building in Portugal
16:40	Nelson Rodrigues, João Silva, José Teixeira, and Senhorinha Teixeira	Assessment of Indoor Thermal Conditions in a Cinema Room Using CFD Simulation: A Case Study
17:00	João Silva, nelson rodrigues, diogo esteves, luis martins, josé teixeira, and senhorinha teixeira	Simulation of PMV and PPD Thermal Comfort using EnergyPlus

Session: A2TM-2

Chair: Massimiliano Petri (University of Pisa)

July 2, 2019

FOURTH FLOOR ROOM N^o80

Time	Authors	Title
16:00	Massimiliano Petri, and Antonio Pratelli	SaveMyBike – A Complete Platform to Promote Sustainable Mobility
16:20	Grazia Concilio, Paola Pucci, Giovanni Vecchio, and Giovanni Lanza	Big data and Policy making: between real time management and the experimental dimension of policies
16:40	Ivana Semanjski, Moustapha	Detection of points of interest from

	Ramachi, and Sidharta Gautama	crowdsourced tourism data
17:00	Gabriele D'Orso, and Marco Migliore	Cycling for home-to-school travel in Palermo: a method for assessing the optimal allocation of new cycling infrastructure
17:20	Massimiliano Petri, Antonio Pratelli, Guglielmo Barè, and Leonardo Piccini	A land use and transport interaction model in the Florence greater metropolitan area
17:40	Kresimir Vidovic, Sadko Mandzuka, and Marko Sostaric	Expert system for urban multimodal mobility estimation based on information from public mobile network

Session: GRMC

Chair: Eufemia Tarantino (Politechnic of Bari)

July 3, 2019

THIRD FLOOR ROOM №56

Time	Authors	Title
09:20	Enrico Borgogno-Mondino, Filippo Sarvia, and Mario A. Gomarasca	Supporting Insurance Strategies in Agriculture by Remote Sensing: a Possible Approach at Regional Level
9:40	Valery Gitis, and Alexander Derendyaev	Geomatics for environmental monitoring, analysis and forecast
10:00	Lorenzo Boccia, Alessandra Capolupo, Giuseppina Esposito, Giuseppe Mansueto, and Eufemia Tarantino	A Crowd-sensing System for geomatics applications
10:20	Nicodemo Abate, Angelo Aromando, and Rosa Lasaponara	Old Methods and New Technologies: a Multidisciplinary Approach to Archaeological Research in Sant' Arsenio (Salerno, Italy).
10:40	Mirko Saponaro, Alessandra Capolupo, Eufemia Tarantino, and Umberto Fratino	Comparative Analysis of Different UAV-based Photogrammetric Processes to Improve Product Accuracies

Session: SEPA-8

Chair: Hector Florez (Universidad Distrital Francisco Jose de Caldas)

July 3, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
09:20	Adedeji Afolabi, Ibukun Afolabi, Emmanuel Eshofonie, and Faith Akinbo	Improving employability skills through a web-based work integrated learning database for Construction students
9:40	Matias Pol'la, Agustina Buccella, and Alejandra Cechich	Using Scope Scenarios to Verify Multiple Variability Models
10:00	Iury Araújo, Mikaelly F. Pedrosa, Jessica Castro, Eudisley G. dos Anjos, and Fernando	Service Discovery Based on Social Profiles of Objects in a Social IoT Network

	Matos	
10:20	JeongAh kim, JinSeok Yang, and DongGi Kim	Guidelines for Architecture Design of Software Product Line
10:40	Khushwant Sehra, Ankit Rajpal, Anurag Mishra, and Girija Chetty	HOG Based Facial Recognition Approach using Viola Jones Algorithm and Extreme Learning Machine

Session: ISSQ-3

Chair: Fabio Silveira (Federal University of Sao Paulo)

July 3, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
09:20	Béla Vancsics	Comparison of Test Groups Based on Behavior and Package Hierarchy
9:40	Isaac Odun-Ayo Odun-Ayo, Victor Geteloma, Ibukun Eweoya, and Ravin Ahuja	Virtualization, Containerization, Composition, and Orchestration of Cloud Computing Services
10:00	Moayid Ali Zaidi, and Ricardo Colomo-Palacios	Code Smells enabled by Artificial Intelligence: A Systematic Mapping
10:20	Nadera Aljawabrah, Tamas Gergely, and Mohammad Kharabsheh	Understanding Test-to-Code Traceability Links: The Need for a Better Visualizing Model
10:40	Daniela Cruzes, Kristin Melsnes, and Sabrina Marczak	Testing in a DevOps Era: Perceptions of Testers in Norwegian Organizations

Session: SCI-4

Chair: Elena Stankova (Saint-Petersburg State University)

July 3, 2019

THIRD FLOOR ROOM №67

Time	Authors	Title
09:20	Vladimir Karelin, Alexander Fominyh, Stanislav Myshkov, and Lyudmila Polyakova	Parameter estimation problems in Markov random processes
9:40	Lyudmila Polyakova, Vladimir Karelin, Stanislav Myshkov, and functions	Some methods for minimizing of d.c.

Elena Stankova

Session: GenTrack-13

Chair: Adam Galuszka (Silesian University of Technology)

July 3, 2019

FOURTH FLOOR ROOM №77

Time	Authors	Title
09:20	Sonia Valladares-Rodriguez, Luis Anido-Rifon, Manuel J. Fernández-Iglesias, and David Facal-Mayo	A Machine Learning Ensemble-of-Classifiers Based Approach for Early Diagnosis of Alzheimer's Disease
9:40	Ana Paula Schiavon, João Paulo Navarro, Marcelo Bernardes Vieira, and Pedro Mário Cruz e Silva	Low Bit Rate 2D Seismic Image Compression With Deep Autoencoders
10:00	Ewa Gilner, Adam Galuszka, and Tomasz Grychowski	Application of artificial intelligence methods in sustainable building design
10:20	Shariq Aziz Butt, Tauseef Jamal, Diaz-Martinez Jorge Luis, Faiza Iqbal, Muhammad Shoaib, and De-La-Hoz-Franco Emiro	IoT Smart Health Security Threats
10:40	Vaclav Skala, and Michal Smolik	Simple and Fast Oexp(N) Algorithm for Finding an Exact Maximum Distance in E2 Instead of O(N^2) or O(N lgN)

Session: GenTrack-14

Chair: Giulio Biondi (University of Florence)

July 3, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
09:20	Alfredo Milani, Stefania Spina, Valentino Santucci, Luisa Piersanti, Giulio Biondi, and Marco Simonetti	Text classification for Italian proficiency evaluation
9:40	Chi-Ying Chen, Zon-Ying Shae, Chien-Jen Chang, Kuan-Yuh Lin, Shu-Mei Tang, and Shao-Liang Chang	A Trusting News Ecosystem against Fake News from Humanity and Technology Perspectives

10:00	Maxim Menshikov	Towards a resident static analysis
10:20	Francesco Tajani, Carmelo Maria Torre, and Felicia Di Liddo	Financial feasibility assessment of public property assets valorization: a case study in Rome (Italy)

Session: FISTA+VRA

Chair: Bernady O. Apduhan (Kyushu Sangyo University)

July 3, 2019

FOURTH FLOOR ROOM №78

Time	Authors	Title
09:20	Maeda Hiroyuki, and Kazuaki Tanaka	Hardware Acceleration of Language Processing in Scripting Programming Languages
9:40	Shree Ram Sigdel, Bernady Apduhan, and Norio Shiratori	A Machine Learning Framework for Edge Computing to Improve Prediction Accuracy in Mobile Health Monitoring
10:00	Ricardo Velezmoro, Robert Ipanaqué, and Josel Mechato	A Mathematica package for visualizing objects immersed in R4
10:20	Icxa Khandelwal, Katharina Stollenwerk, Björn Krüger, and Andreas Weber	Posture Classification based on a Spine Shape Monitoring System

Session: CompAstro-TCMMA

Chair: Marzio Rosi (University of Perugia)

July 3, 2019

FOURTH FLOOR ROOM №80

Time	Authors	Title
09:20	Marzio Rosi, Dimitrios Skouteris, Nadia Balucani, Luca Mancini, Noelia Faginas Lago, and Linda Podio	Electronic Structure and Kinetics Calculations for the Si+SH Reaction, a Possible Route of SiS Formation in Star-forming Regions
9:40	Stefano Falcinelli, Marzio Rosi, Franco Vecchiocattivi, and Fernando Pirani	Analytical potential energy formulation for a new theoretical approach in Penning ionization

10:00	Nadia Balucani, Leonardo Pacifici, Dimitrios Skouteris, Adriana Caracciolo, Piergiorgio Casavecchia, and Stefano Falcinelli	A computational study of the reaction $N(2D) + C_6H_6$ leading to pyridine and phenylnitrene.
10:20	Fanny Vazart	Can interstellar $CH_3OCH_3 + H^+$ lead to protonated acetaldehyde CH_3CHOH^+ ?
10:40	Noelia Faginas Lago, Yusuf Bramastya Apriliyanto, and Andrea Lombardi	Molecular Simulations of $CO_2/N_2/H_2O$ Gaseous Mixture Separation in Graphtriyne Membrane

Session: SPA-Smart_Water

Chair: Francesco Scorza (University of Basilicata)

July 3, 2019

THIRD FLOOR ROOM №56

Time	Authors	Title
14:00	Giacomo Viccione, Antonio Nesticò, Federica Vernieri, and Maurizio Cimmino	A pilot plant for energy harvesting from falling water in drainpipes. Technical and economic analysis
14:20	Stefano Savalli, Lucia Saganeiti, Michele Greco, and Beniamino Murgante	Integrated assessment of the anthropic pressure level on natural water bodies: the case study of the Noce river (Basilicata, Italy)
14:40	Nicola Masini, and Fulong Chen	Along and around the Silk Road: the contribution of Remote Sensing for the study of the human past in China
15:00	Angela Pilogallo, Lucia Saganeiti, Francesco Scorza, and Beniamino Murgante	Ecosystem services approach to evaluate renewable energy plants effects
15:20	Arianna Mazzariello, Manuela Nardoza, and Francesco Scorza	View sheed assessment for urban renovation strategies: landscape perception values plays a role for urban development.

Session: SEPA-9

Chair: Hector Florez (Universidad Distrital Francisco Jose de Caldas)

July 3, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
14:00	Hector Florez, Edwarth Garcia, and Deisy Muñoz	Automatic Code Generation System for Transactional Web Applications
14:20	César Paltán, Josep Costa , and Jorge Fajardo	Computed tomography of a polymer composites reinforced with natural short fiber.
14:40	Adam Gałuszka, Tomasz Grzejszczak, Carmen Lungoci, Ewa Gilner, and Tomasz Hejczyk	Discrete Optimization Based Rail Passengers Safety and Comfort Communication System Configuration Design
15:00	Dannylo Egidio, and Gibeon Aquino	VIoT -- A Step towards Easing the Interoperability of IoT-based Applications
15:20	Onyinyechi Steve-Essi , Francis Idachaba, Segun Popoola, Aderemi Atayero, Bamidele Adebisi, and Craig Nietzsche	Adaptive Channel Borrowing Scheme for Capacity Enhancement in Cellular Wireless Networks

Session: ISSQ-4

Chair: Fabio Silveira (Federal University of Sao Paulo)

July 3, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
14:00	Rogério Marinke, Eduardo Guerra, Fabio Silveira, Rafael Azevedo, Wagner Nascimento, and Rodrigo Almeida	Towards An Extensible Architecture for Refactoring Test Code
14:20	Ranjan Behera, Santanu Kumar Rath, Sanjay Misra, Marcelo	Machine Learning Approach for Reliability Assessment of Open Source

	Leon, and Adewole Adewumi	Software
14:40	Mariam Bachiri, Ali Idri, Leanne A Redman, Jose Luis Fernandez-Aleman, and Ambrosio Toval	Requirements Catalog of Mobile Personal Health Records for Prenatal Care
15:00	Chamundeswari Arumugam, Varsha Bhargavi, Dwarakanathan, Gnanamary S, Vishalraj Natarajan Neyveli, Rohit Kanakuppaliyalil Ramesh, and Yeshwanthraa Kandhavel	Prediction of SQL Injection Attacks in Web Applications
15:20	Danilo Arruda, Matheus Marinho, Eric Souza, and Fernando Wanderley	A chatbot for goal-oriented requirements modeling

Session: QuaCheSol

July 3, 2019

FIFTH FLOOR ROOM №93

Time	Authors	Title
14:00		
15:40		

Session: SFC

Chair: JeongPil Jeong (Sungkyunkwan University)

July 3, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
14:00	Yohan Joo, and Jongpil Jeong	Under Sampling Adaboosting Shapelet Transformation for Time Series Feature Extraction
14:20	Byungjun Park, and Jongpil Jeong	Knowledge-based Multi-agent System for Smart Factory of Small-sized Manufacturing Enterprises in Korea
14:40	Soonsung Hwang	Design and Analysis of Docker-based ArtificialIntelligence Platform for

		Smart Manufacturing
15:00	Myungsoo Kim, Jaehyeong Lee, and Jongpil Jeong	Open Source based Industrial IoT Platforms for Smart Factory: Concept, Comparison and Challenges
15:20	Jaehyeong Lee, Changyong Um, Soonsung Hwang, and Jongpil Jeong	Container-based Multi-purpose IoT Architecture for User-Friendly Applications with Cloud Chatbot Agent

Session: CMSIM-1

Chair: M. Filomena Teodoro (Lisbon University and Portuguese Naval Academy)

July 3, 2019

FOURTH FLOOR ROOM N^o78

Time	Authors	Title
14:00	M. Filomena Teodoro, and Marina P. Andrade	Some issues about Iberian Energy Prices
14:20	Riedson Baptista, Sérgio Bento, Leonardo Lima, Isaac Santos, Andrea Valli, and Lucia Catabriga	A Nonlinear Subgrid Stabilization Parameter-Free Method to Solve Incompressible Navier-Stokes Equations at High Reynolds Numbers
14:40	Sérgio Souza Bento, Leonardo Muniz de Lima, Isaac P. Santos, and Lucia Catabriga	Local Preconditioning Techniques Coupled with a Variational Multiscale Method to Solve Compressible Steady Flows at Low Mach Numbers
15:00	Paula Simões, M. Lucília Carvalho, Sandra Aleixo, Sérgio Gomes, and Isabel Natário	A spatio-temporal auto-regressive model for generating savings calls to a health line
15:20	M. Filomena Teodoro, and Carla Simão	Study About Pediatric Hypertension in Lisboa and Vale do Tejo Region

Session: TCCMA

Chair: Noelia Faginas Lago (University of Perugia)

July 3, 2019

FOURTH FLOOR ROOM №80

Time	Authors	Title
14:00	Andrea Lombardi, Federico Palazzetti, and Vincenzo Aquilanti	Molecular dynamics of chiral molecules in hyperspherical coordinates
14:20	Sergio Tasso, Simonetta Pallottelli, Osvaldo Gervasi, Federico Sabbatini, Valentina Franzoni, and Antonio Laganà	Cloud and Local servers for a federation of Molecular Science Learning Object Repositories
14:40	Andrea Lombardi, Noelia Faginas-Lago, Eduardo Campos Vaz, and Vincenzo Aquilanti	The invariance approach to structure and dynamics: classical hyperspherical coordinates
15:00	Daniele Licari, Sergio Rampino, and Vincenzo Barone	Machine learning of potential-energy surfaces within a bond-order sampling scheme
15:20	Surajit Nandi, Danilo Calderini, Julien Bloino, Sergio Rampino, and Vincenzo Barone	A modern-Fortran program for chemical kinetics on top of anharmonic vibrational calculations
15:40	Concetta Caglioti, Robenilson Ferreira dos Santos, Federivo Palazzetti, and Vincenzo Aquilanti	Screens displaying structural properties of alanine in peptides

Session: SPA-EMEUE

Chair: Maria Cerreta (University of Naples)

July 3, 2019

THIRD FLOOR ROOM №56

Time	Authors	Title
16:00	Francesca Salvo, Pierluigi Morano, Francesco Tajani, and	Weight coefficients in the Appraisal System Approach

	Manuela De Ruggiero	
16:20	Francesco Tajani, Carmelo Maria Torre, and Felicia Di Liddo	Financial feasibility assessment of public property assets valorization: a case study in Rome (Italy)
16:40	Giulia Datola, Marta Bottero, and Elena De Angelis	How urban resilience can change cities: a System Dynamics Model approach
17:00	Giovanni Fortunato, Francesco Scorza, and Beniamino Murgante	Cyclable city: a territorial assessment procedure for disruptive policy-making on urban mobility
17:20	Lucia Saganeiti, Angela Pilogallo, Carmen Izzo, Francesco Scorza, and Beniamino Murgante	Development strategies of agro-food sector in Basilicata region (Italy): evidence from INNOVAGRO project

Session: SEPA-10

Chair: Sanjay Misra (Covenant University)

July 3, 2019

THIRD FLOOR ROOM №57

Time	Authors	Title
16:00	Segun Popoola, Aderemi Atayero, Onyinyechi Steve-Essi, and Sanjay Misra	Data Analytics: Global Contributions to Computer Science Research (2012-2017)
16:20	Sergio Valdivia, Broderick Crawford, Ricardo Soto, José Lemus-Romani, Gino Astorga, and Sanjay Misra	Bridges Reinforcement Through Conversion of Tied-Arch Using Crow Search Algorithm
16:40	Michal Žemlička, and Jaroslav Král	Software Architecture Enabling Effective Control of Selected Quality Aspects
17:00	Nikolay Voit, Sergey Kirillov, and Dmitry Kanev	Automation of Workflow Design in an Industrial Enterprise
17:20	Nikolay Voit, Dmitry Kanev, Sergey Kirillov, and Maria Ukhanova	The method of translation of the diagram with one type directed links into the inhibitor petri net

Session: ISSQ-5

Chair: JeongAh Kim (Catholic Kwandong University)

July 3, 2019

THIRD FLOOR ROOM №59

Time	Authors	Title
16:00	Shweta Rani, and Bharti Suri	Adopting Social Group Optimization Algorithm using Mutation Testing for Test Suite Generation: SGO-MT
16:20	Viktor Csuvik, András Kicsi, and László Vidács	Evaluation of Textual Similarity Techniques in Code Level Traceability
16:40	Guillermo Rodriguez, Leonardo Fernández Estebarena, Cristian Mateos, and Sanjay Misra	Reducing Efforts in Web Services Refactoring

Session: QuaCheSol

July 3, 2019

FIFTH FLOOR ROOM №93

Time	Authors	Title
16:00-17:40		

Session: SFC+MSA4CPS

Chair: Saad Qaisar (National University of Sciences and Technology, Pakistan)

July 3, 2019

FOURTH FLOOR ROOM №79

Time	Authors	Title
16:00	Yohan Han, Byungjun Park, and Jongpil Jeong	Fog Based IIoT Architecture Based on Big Data Analytics for 5G-networked Smart Factory

16:20	Ahn Dae Jun, and Jeong Jongpil	Design and Analysis of OpenStack Cloud Smart Factory Platform for Manufacturing Big Data Applications
16:40	Saad Qaisar, Syed Hamid Rasool, and Abdul Basit	Evaluating HTTP adaptive streaming algorithms under parallel TCP connections
17:00	Qaisar Shafi, Saad Qaisar, and Abdul Basit	Software Defined Machine Learning based Anomaly Detection in Fog based IoT Network

Session: CMSIM-WPDM

Chair: Massimo Cafaro (University of Salento)

July 3, 2019

FOURTH FLOOR ROOM N°78

Time	Authors	Title
16:00	João Faria, Rosa Teodósio, and M. Filomena Teodoro	Knowledge of the boarded population about Zika virus
16:20	Anas AlDabbagh, Giuseppe Di Fatta, and Antonio Liotta	The Distributed p-Median Problem in Computer Networks
16:40	Sayantana Dey, Lee Carraher, Anindya Moitra, and Philip A. Wilsey	Clustering Data in Secured, Distributed Datasets

Chair: Rosa Lasaponara:

July 4th, 2019

FIRST FLOOR ROOM N°3

09:00– 10:00	Rosa Lasaponara: Analysis, integration and interpretation of Big Earth data in the Copernicus Era
10:20– 10:50	Closing Ceremony