# Final Program of the MCCSIS 2019

# Multi Conference on Computer Science and Information Systems

# Conference Sessions:

# Big Data Analytics, Data Mining and Computational Intelligence 2019

# Theory and Practice in Modern Computing 2019

## Tuesday, 16th July 2019

**08:00-19:00 Welcome Desk**

**09:45-10:00 Session O – Opening Session**
**(Room: Auditório Vitor Santos)**

*Prof. Ajith P. Abraham*

**10:00-11:00 Session KL1 – Keynote Presentation**
**(Room: Auditório Vitor Santos)**

**"INCLUSIVE INTERFACES"**
*By Prof. Paula Escudeiro, Institute of Engineering of Porto, Polytechnic Institute of Porto, Portugal*

**11:00-11:30 Coffee Break**

**11:30-13:00 Session FPD 16.1**
**Computational Intelligent Frameworks**
**(Room: Sala de Reuniões)**
*Chair: Krzysztof Dzieciolowski*

**NOVEL LEARNING STRATEGY BASED ON GENETIC PROGRAMMING FOR CREDIT CARD FRAUD DETECTION IN BIG DATA (F070)**
*Ibtissam Benchaji, Samira Douzi and Bouabid El Ouahidi*
**TRANSFORMATION OF SYSTEMS OF INTERACTIVE SIMULATION OF CONFLICT SITUATIONS INTO SYSTEMS BASED ON DECISION PATTERNS (F142)**
*Andrzej Najgebauer*
**RECOMMENDER SYSTEM USING UNSUPERVISED MACHINE LEARNING FOR SATISFACTION SURVEYS (D029)**
*Baba Mbaye*

**13:00-14:30 Lunch Break**

**14:30-15:30 Session KL2 – Keynote Presentation**
**(Room: Auditório Vitor Santos)**

**CHECKMATE THE ENEMY: ADVERSARIAL REASONING FOR DEFENSE SYSTEMS**
*By Dr. Boris Stilman, University of Colorado Denver, USA & STILMAN Advanced Strategies, USA*

**15:30-16:30 Session FP 16.2**
**Theory and Practice in Modern Computing**
**(Room: Auditório Vitor Santos)**
*Chair: Ajith P. Abraham*

**EXPERIMENTAL ANALYSIS OF MPTCP CONGESTION CONTROL ALGORITHMS; LIA, OLIA AND BALIA (F049)**
*Toshihiko Kato, Adhikari Diwakar, Ryo Yamamoto, Satoshi Ohzahata and Nobuo Suzuki*
**IMPROVING EFFICIENCY OF A WEB-BASED DISTRIBUTED EVOLUTIONARY COMPUTING SYSTEM (F050)**
*Jerzy Duda and Wojciech Dłubacz*

**16:30-17:00 Coffee Break**


**17:00-18:00 Poster Session**
**(Foyer)**
*Chair: Ajith P. Abraham*

**SENTIMENT SCORES OF SENTIMENT KEYWORDS: ANALYSIS OF HOTEL REVIEW DATA (P021)**
*Ye-Seul Jeon, Eun-Young Jang and Hwan-Seok Jang*
**DATA MINING FOR ENERGY MANAGEMENT IN A WATER DISTRIBUTION NETWORK (P117)**
*Hohyun Lee, Dae Wook Kim, Sung Taek Hong and Gang Wook Shin*
**EXPLAINING BLACK-BOX MACHINE LEARNING MODELS (P104)**
*Krzysztof Dzieciolowski*
**STUDY ON DATA CLEANSING ALGORITHMS FOR OUTLIERS IN WATER SUPPLY SYSTEM (P118)**
*Jong Rib Kim, Gang Wook Shin, Sung Taek Hong and Dae Wook Kim*
**A NOISE-TOLERANT EVOLUTIONARY ALGORITHM BASED ON ACCUMULATIVE SAMPLING (P097)**
*Jeongmin Kim, Steven Kurniawan, and Kwang Ryel Ryu*


**19:00-Welcome Cocktail**


# Wednesday, 17<sup>th</sup> July 2019


**08:00-15:45 Welcome Desk**


**09:00-11:00 Session FP 17.1**
**Theory and Practice in Modern Computing**
**(Room: Sala de Reuniões)**
*Chair: Jerzy Duda*

**METHOD OF CHEMICAL FORMULAS COMPARISON (F041)**
*Nataliya A. Vayngolts, Dmitriy M. Korobkin, Sergey A. Fomenkov, Sergey G. Kolesnikov and Alla G. Kravets*
**AN EXAMINATION OF STUDENT LEARNING OF SCIENCE CONCEPTS USING INTERACTIVE INSTRUCTIONAL MULTIMEDIA TECHNOLOGY (F025)**
*Maria Georgiou*
**EXTRACTION OF STRUCTURAL ELEMENTS OF INVENTIONS FROM RUSSIAN-LANGUAGE PATENTS (F048)**
*Dmitriy M. Korobkin, Sergey S. Vasiliev, Sergey A. Fomenkov and Vladimir I. Lobeyko*
**A CLUSTERING-BASED JUDGMENT METHOD OF FALSE POSITIVE ALERTS (F028)**
*Shinya Iwasaki, Tomo Kakuta, Yoshihiro Sekiguchi, Yukihiro Konishi, Tomoya Ohtori and Norihisa Komoda*


**09:00-11:00 Tutorial**
**(Room: Sala Aula C218)**

**DISCOVERIES ON DEMAND: DISCOVERING THE ALGORITHM OF DISCOVERY**
*Dr. Boris Stilman, University of Colorado Denver, USA & STILMAN Advanced Strategies, USA*


**11:00-11:30 Coffee Break**


**11:30-13:00 Session FP 17.2**
**Big Data Algorithms and Architectures**
**(Room: Sala de Reuniões)**
*Chair: Daqing Chen*

**REVIEWING DATA ACCESS PATTERNS AND COMPUTATIONAL REDUNDANCY FOR MACHINE LEARNING ALGORITHMS (F037)**
*Imen Chakroun, Tom Vander Aa and Tom Ashby*
**AN ETL PATTERN FOR LOG CONFIGURATION AND ANALYSIS (F050)**
*Bruno Oliveira, Óscar Oliveira, Telmo Matos, Vasco Santos and Orlando Belo*
**DRIVING MODEL OF BIG DATA GOVERNANCE IN URBAN COMMUNITY SAFETY SERVICE (F091)**
*Zhao-Ge Liu and Xiang-Yang Li*

**13:00 – 14:30 Lunch Break**

**14:30-15:20 Session FP 17.3**
**Data Mining Applications**
**(Room: Sala de Reuniões)**
*Chair: Jens Kiefer*

**TOWARDS AUTOMATED COST ANALYSIS, BENCHMARKING AND ESTIMATING IN CONSTRUCTION: A MACHINE LEARNING APPROACH (F137)**
*Daqing Chen, Laureta Hajderanj and James Fiske*
**TEXT MINING APPLICATIONS TO FACILITATE ECONOMIC AND FOOD SAFETY LAW ENFORCEMENT (S139)**
*Gustavo Magalhães, Brigida Monica Faria, Luis Paulo Reis and Henrique Lopes Cardoso*

**15:45 – Conference Tour and Dinner**

# Thursday, 18th July 2019

**08:15-13:00 Welcome Desk**

**09:10-11:00 Session FSP 18.1**
**Big Data Applications // Others**
**(Room: Sala de Reuniões)**
*Chair: Tom Vander Aa*

**USAGE OF PROCESS MINING IN THE 'OFFER TO PRODUCTION PROCESS' OF A CONTRACT MANUFACTURER FOR CAST COMPONENTS (F068)**
*Jens Kiefer and Melina Precht*
**COMPLIANCE STUDY OF HAZARD ANALYSIS AND CRITICAL CONTROL POINT SYSTEM (F138)**
*Tatiana Sousa Pinto, Brigida Monica Faria, Luis Paulo Reis, Henrique Lopes Cardoso and Tiago Santos*
**A BIG REMOTE SENSING DATA ANALYSIS USING DEEP LEARNING FRAMEWORK (F135)**
*Hanen Balti, Imen Chebbi, Nedra Mellouli, Imed Riadh Farah and Myriam Lamolle*
**REDDIT SENTIMENT ANALYSIS TO IMPROVE ELECTION PREDICTIONS (S032)**
*Bryant Hwang*

**11:00-11:30 Coffee Break**

**11:30-12:40 Session FSP 18.2**
**Virtual Reality // Software Engineering**
**(Room: Sala de Reuniões)**
*Chair: Alcínia Zita Sampaio*

**VIEW: A CONCEPT FOR AN IMMERSIVE VIRTUAL REALITY IMAGE INTERPRETATION WORKBENCH (F032)**
*Alexander Streicher, Julien Hoffmann and Wolfgang Roller*
**BIM CAPACITIES IMPROVED WITH VR TECHNOLOGY IN THE BUILDING PROJECT (S016)**
*Alcínia Zita Sampaio*
**AN OVERVIEW AND EVALUATION OF BLACK-BOX TESTING METHODS FOR SYSTEM TESTING (S029)**
*Anastasija Špakova and Marina Uhanova*

**12:40 Best Paper Awards Ceremony and Closing Session**
**(Room: Sala de Reuniões)**
*Prof. Ajith P. Abraham*