INISTA’2018 Conference
Detailed Program

Tuesday 3/7/2018

8:30-9:30    Registration

9:30-10:30   Plenary Session 1
Chair:

Keynote Speaker: Vincenzo Piuri, University of Milan, Italy
Title: Computational Intelligence for Dependable and Resilient Cloud Computing

10:30-11:30  INISTA Session 1: Evolutionary Algorithms 1 – Human Perception (EVOL1_HUP)
Chair:

Lauren Heller, Michail Tsikerdekis
Selective Equation Constructor: A Scalable Genetic Algorithm (full)
Kornel Chrominski, Magdalena Tkacz, Mariusz Boryczka
Epigenetically Inspired Genetic Algorithm for Clustering Data (full)
Albena Tchamova, Jean Dezert, Pavlina Konstantinova, Nadejda Bocheva, Biliana Genova, Miroslava Stefanova
Human Heading Perception Based on Form and Motion Combination (full)

10:30-11:30  MT4BD1 Special Session
Chair:

MT4BD1 Keynote Speaker: Michael P. Papazoglou, Tilburg University, The Netherlands
Title: From Smart Data Systems to Smart Industrial-Purpose Applications

11:30-12:00  Coffee Break

12:00-13:20  INISTA Session 2: Classification (CLA)
Chair:

Stefanos Doltsinis, Marios Krestenitis, Zoe Doulgeri
Real-Time Event Detection in Time-Series Classification Based on Amplitude Rejection (full)
Nikolaos Kolokas, Thanassis Vafeiadis, Dimosthenis Ioannidis, Dimitrios Tzovaras
Forecasting Faults of Industrial Equipment Using Machine Learning Classifiers (full)
Hamza Erol, Bala Mikat Tyoden, Recep Erol
Classification Performances of Data Mining Clustering Algorithms for Remotely Sensed Multispectral Image Data (full)
Leandro Y. Mano
Emotional Condition in the Health Smart Homes Environment: Emotion Recognition Using Ensemble of Classifiers (full)

*Full papers are assigned 20 minutes; short are assigned 15 minutes.
12:00-13:20  INISTA Session 3: Fuzzy Modeling1 (FUZZ1)
Chair:

Martins Olaleye, Keshav Dahal, Zeeshan Pervez
A Fuzzy-based Throughput Prediction for Wireless Communication Systems (full)
Stephen Stubberud, Kathleen Kramer, Allen Stubberud
Fuzzy-Based Evidence Accrual for Target Maneuver Detection (full)
Manuela Panoiu, Loredana Ghiorize, Caius Panoiu
Neuro-fuzzy Modeling and Prediction of Current Total Harmonic Distortion for High Power Nonlinear Loads (full)
Vardis-Dimitris Anezakis, Muhammed Maruf Öztürk
Verification of the Effectiveness of Fuzzy Rule-based Fault Prediction: A Replication Study (short)

13:20-14:30  Lunch

14:30-16:00  MT4BD2 Special Session
Chair:

Dimitris Mastorodimos, Savvas. A. Chatzichristofis, Athanassios Jimoyiannis, Klitos Christodoulou
Making Sense of Fractions Using E-learning Platforms - A Survey (full)
Marios Mourelatos, Thomas Amorgianiotis, Christos Alexakos, Spiros Likothanassis
Financial Indices Modelling and Trading Utilizing Deep Learning Techniques. The ATHENS SE FTSE/ASE Large Cap Use Case (full)
Sotirios Tasoulis, Aristidis Vrahatis, Spiros Georgakopoulos, Vassilis Plagianakos
Real Time Sentiment Change Detection of Twitter Data Streams (full)
Panayiotis Christodoulou, Sotirios P. Chatzis, Andreas S. Andreou
A Recurrent Latent Variable Model for Supervised Modeling of High-Dimensional Sequential Data (full)

14:30-16:00  INISTA Session 4 Deep Learning – Big Data – Security (DEE_BD_SC)
Chair:

Urszula Markowska-Kaczmar, Michal Skiba
Is Convolutional Network Competitive for Vision Method in the Furniture Dowel Quality Control? (full)
Gokhan Bilgin, Abdulkadir Albayrak
A Hybrid Method of Superpixel Segmentation Algorithm and Deep Learning Method in Histopathological Image Segmentation (full)
Konstantinos Demertzis, Lazaros Iliadis, Vardis-Dimitris Anezakis
MOLESTRA: A Multi-Task Learning Approach for Real-Time Big Data Analytics (full)
Michal Maliszewski, Steffen Priesterjahn, Urszula Boryczka
DBSCAN Algorithm as a Means to Protect the ATM Systems (full)

16:00-16:30  Coffee Break

*Full papers are assigned 20 minutes; short are assigned 15 minutes.*
16:30-17:50 INISTA Session 5: Data Mining - Clustering (DAM_CLU)
Chair:

Sevinç Ilhan Omurca, Ekin Ekinci
Using Adjusted Laplace Smoothing to Extract Implicit Aspects from Turkish Hotel Reviews (full)
Leonidas Akritidis, Panayiotis Bozanis
Effective Unsupervised Matching of Product Titles with k-Combinations and Permutations (full)
Erhan Turan, Umut Orhan
Building a Turkish Semantic Network and Connecting Synonym Senses Bidirectionally (full)
Ahmet Murat Turk, Alper Bilge
A Robust Multi-Criteria Collaborative Filtering Algorithm (full)

16:30-17:30 MT4BD3 Special Session
Chair:

Yiannis Verginadis, Ioannis Patiniotakis, Gregoris Mentzas
Metadata Schema for Data-Aware Multi-Cloud Computing (full)
Andreas Pegkas, Christos Alexakos, Spiros Likothanassis
Credit-based Algorithm for Virtual Machines Scheduling (full)
Zinon Zinonos, Vasos Vassiliou, Klitos Christodoulou
Reliable Mobility Support for e-Health Monitoring: A Performance Evaluation (full)

17:30-18:30 INISTA Session 6: Medical - e-Health (MED_eHE)
Chair:

Spyridon Kalogiannis, Evangelia I. Zacharaki, Konstantinos Deltouzos, Marina Kotsani, John Ellul, Athanase Benetos, Vasileios Megalookonomou
Geriatric Group Analysis by Clustering Non-linearly Embedded Multi-sensor Data (full)
Mahmoud Al Ahmad, Soha Ahmed
Piezologist: A Novel Wearable Piezoelectric-based Cardiorespiratory Monitoring System (full)
Mahmoud Al Ahmad, Mohammad Al Hemairy, Saad Amin
A New Algorithm for Online Diseases Diagnosis (full)

20:30-22:00 Welcome Reception (in the Mediterranean Palace Hotel)

*Full papers are assigned 20 minutes; short are assigned 15 minutes.*
**Wednesday 4/7/2018**

8:30-9:30  Registration

9:30-10:30  Plenary Session 2
Chair:

Keynote Speaker: Michalis Vazirgiannis, Ecole Polytechnique, Palaiseau, France
Title: Graph-of-word: Boosting Text Mining with Graphs

10:30-11:30  INISTA Session 7: Neural Network-Machine Learning (ANN_ML)
Chair:

Carsten Hahn, Sebastian Feld
Collision Avoidance using Intuitive Physics (full)
Petia Koprinkova-Hristova, Nadejda Bocheva, Simona Nedelcheva
Investigation of Feedback Connections Effect of a Spike Timing Neural Network Model of Early Visual System (full)
Ireneusz Czarnowski, Piotr Jędrzejowicz
Firefly Algorithm for the RBF Network Design (full)

10:30-11:30  MLMAT Special Session
Chair:

Cenk Bircanoglu, Meltem Atay, Fuat Beser, Ozgun Genc, Merve Ayyuce Kizrak
RecycleNet: Intelligent Waste Sorting Using Deep Neural Networks (full)
Chung-Ming Ou
Immune Memory Mechanism Inspired by Dynamical Systems of Antibody Chains (full)
Joydeep Ghosh, Dean Teffer
Non-parametric Discovery of Topics and Communities in Distributed and Streaming Environments (full)

11:30-12:00  Coffee Break

12:00-13:30  INISTA Session 8: Evolutionary Algorithms 2 (EVOL2)
Chair:

Sinem Çınaroğlu, Sema Bodur
A New Hybrid Approach Based on Genetic Algorithm for Minimum Vertex Cover (full)
Kalyani Selvarajah, Pooya Moradian Zadeh, Ziad Kobti, Mehdi Kargar, Mohd Tazim Ishraque, Kathryn Pfaff
Team Formation in Community-Based Palliative Care (full)
Andrei Petrovski, Laud Ochei, Julian Bass
Evolutionary Computation for Optimal Component Deployment with Multitenancy Isolation in Cloud-hosted Applications (full)
Dilpreet Singh, Pooya Moradian Zadeh, Ziad Kobti
A Multilevel Cooperative Multi-Population Cultural Algorithm (full)

*Full papers are assigned 20 minutes; short are assigned 15 minutes.*
12:00-13:30  EnBIS Special Session
Chair:

Georgios Spathoulas, Domantas Pelaitis
   Developing a Universal, Decentralized and Immutable Erasmus Credit Transfer System on Blockchain (full)
Charalampos Kouzinopoulos, Konstantinos Giannoutakis, Konstantinos Votis, Dimitrios Tzovaras,
   Anastasija Collen, Niels Nijdam, Dimitri Konstantas, Georgios Spathoulas, Pankaj Pandey, Sokratis Katsikas
   Implementing a Forms of Consent Smart Contract on an IoT-based Blockchain to Promote User Trust (full)
Georgios Spathoulas, Anastasija Collen, Pankaj Pandey, Niels A. Nijdam, Sokratis Katsikas,
   Charalampos S. Kouzinopoulos, Maher Ben Moussa, Konstantinos M. Giannoutakis, Konstantinos Votis, Dimitrios Tzovaras
   Towards Reliable Integrity in Blacklisting: Facing Malicious IPs in GHOST Smart Contracts (full)
Apostolos C. Tsolakis, Ioannis Moschos, Konstantinos Votis, Dimosthenis Ioannidis, Dimitrios Tzovaras,
   Pankai Pandey, Sokratis Katsikas, Evangelos Kotsakis, Raúl García-Castro
   A Secured and Trusted Demand Response System Based on Blockchain Technologies (full)

13:30-14:30  Lunch

15:10  Departure to the archeological site of Vergina

Macedonian Royal tombs and treasures, tomb of King Philippe II, father of Alexander the Great.
COST 30 euros per person (bus return ticket, entrance into the museum, official guide).

21:00  Conference Dinner (down-town tavern)

*Full papers are assigned 20 minutes; short are assigned 15 minutes.
### Thursday 5/7/2018

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<tr>
<td>8:30-9:30</td>
<td>Registration</td>
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<td>9:30-10:30</td>
<td>Plenary Session 3</td>
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<td><strong>Chair:</strong></td>
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<td>Keynote: Yannis Kompatsiaris, Information Technologies Institute, Thessaloniki, Greece</td>
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<td></td>
<td>Title: Media Analytics for Fake News Detection: Content, Context and Social Approaches</td>
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<td>10:30-11:00</td>
<td>Coffee Break</td>
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<td>11:00-12:20</td>
<td><strong>INISTA Session 9:</strong> Robotics – Video Processing (ROB_VID)</td>
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<td>Mustafa Kemal Ariturk, Doga Akcinar, Tulay Yıldırım</td>
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<td>Speaker Dependent Voice Controlled Robotic Arm (full)</td>
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<td>Ugur Mutlu, Tuğberk Demir, Tulay Yıldırım</td>
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<td>Motion-Controlled Virtual Reality Robotic Arm with Kinect (full)</td>
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<td>Mihailo Lazarevic, Petar D.Mandić, Boško Cvetic, Bočanović, Mladen Dragović</td>
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<td>Advanced Open-closed-loop PID Type ILC Control of a Robot Arm (full)</td>
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<td>Georgios Tsatiris, Kostas Karpouzis, Stefanos Kollias</td>
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<td>Applications of Human Action Analysis and Recognition on Wireless Network Infrastructures: State of the Art and Real-world Challenges (full)</td>
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<td>11:00-12:20</td>
<td><strong>INISTA Session 10:</strong> Fuzzy Modeling 2- DADE Special Session (FUZZ2-DAD)</td>
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<td>Fethi Candan, Aykut Beke, Tufan Kumbasar</td>
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<td>Design and Deployment of Fuzzy PID Controllers to the Nano Quadcopter Crazyflie 2.0 (full)</td>
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<td>Anastasios Katsoakis, Avrilia Konguetsof, Lazaros Iliadis, Basil Papadopoulos</td>
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<td>Classification of Road Accidents Using Fuzzy Techniques (full)</td>
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<td>Arkadiusz Warzyński, Grzegorz Kołaczek</td>
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<td>Intrusion Detection Systems Vulnerability on Adversarial Examples (short)</td>
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<td>Jolanta Mizera-Pietraszko, Grzegorz Kolaczek, Ricardo Rodriguez Jorge, Edgar Alonso Martinez Garcia</td>
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<td>Information Streaming Systems: A Review (full)</td>
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<td>12:20-13:40</td>
<td><strong>INISTA Session 11:</strong> Natural Language – Image Processing (NAT_IMG)</td>
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<td>Raluca Rob, Caius Panoiu, Stela Rusu Anghel</td>
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<td>Intelligent System for Tracking and Logging the Zigzag Pantograph Motion (full)</td>
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<td>Zahraa A. Al Saffar, Tulay Yıldırım</td>
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<td>An Optimized Clustering Approach for Tumor Segmentation Using Local Difference of Intensity Level in MR Brain Images (full)</td>
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<td>Mare Koit</td>
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<td>How People Negotiate? From the Analysis of a Dialogue Corpus to a Dialogue System (full)</td>
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*Full papers are assigned 20 minutes; short are assigned 15 minutes.*
Tuğba Pamay, Gülşen Eryiğit  
Turkish Coreference Resolution (full)

12:20-13:40  RIS1 Special Session  
Chair:

Keynote Speaker: Jair Minoro Abe, University of Sao Paolo, Brazil  
Title: Paraconsistency and Paracompleteness – Applications

13:40-14:45  Lunch

14:45-15:00  Coffee Break

15:00-16:20  RIS2 Special Session

Caique Zaneti Kirilo, Marcelo Nogueira, Kazumi Nakamatsu, Luiz Carlos Machi Lozano, Luiz Antonio de Lima, Jair Minoro Abe  
Evaluation of Adherence to The Model Six Sigma Using Paraconsistent Logic (full)

Fábio Vieira do Amaral, Jair Minoro Abe, Henry Costa Ungaro, Lauro Henrique de Castro Tomiatti, Kazumi Nakamatsu  
Paraconsistent Extractor of Mammographic Images Applied in the Process of Diagnosis of Breast Cancer Assisted by Computer (full)

Jair Minoro Abe, Kazumi Nakamatsu, Seiki Akama, Alireza Ahray  
Handling Paraconsistency and Paracompleteness in Robotics (full)

Ari Aharari, Masayoshi Inada, Jair Minoro Abe, Kazumi Nakamatsu  
Develop an Embedded IoT System and its Applications (short)

16:30-16:45  Closing Session

*Full papers are assigned 20 minutes; short are assigned 15 minutes.*