

# 2<sup>nd</sup> INNS BIG DATA'2016 Conference

## Detailed Program

### Sunday 23/10/2016

- 15:00-19:00** Guided trip to Vergina archeological site (museum and tomb of Macedonian King Philip II)  
**19:00** **Welcome Reception – Registration**

### Monday 24/10/2016

**8:00-** **Registration**

**9:00-9:15** **Opening Session**

**9:15-10:15** **PlenarySession 1**

Chair: Plamen Angelov

Keynote Speaker: Rudolf Kruse, OVG University of Magdeburg

*Title: Modeling Self-Explanatory Big Data Applications*

**10:15-11:30** **Session 1: BIG DATA MODELING I (BDM1)**

Chair: Luca Oneto

Cesare Alippi, Giacomo Boracchi and Diego Carrera

*CCM: Controlling the Change Magnitude in High Dimensional Data (full)*

Shaona Ghosh and Adam Prugel-Bennett

*Extended Formulations for Online Action Selection on Big Combinatorial Action Sets (full)*

Boris Lorbeer, Ana Kosareva, Bersant Deva, Dženan Softić, Peter Ruppel, Axel Küpper

*A-BIRCH: Automatic Threshold Estimation for the BIRCH Algorithm (full)*

**10:15-11:40** **Session 2: BIG DATA CLASSIFICATION/SECURITY (BDCS)**

Chair: Manuel Roveri

Konstantina Karponi and Grigorios Tsoumakas

*An Empirical Comparison of Methods for Multi-Label Data Stream Classification(full)*

Ming Jiang and Li Zhang

*Learning Using Multiple-Type Privileged Information and SVM+ThinkTank(short)*

Oscar Samudio, Marley Vellasco, Ricardo Tanscheit, Adriano Koshiyama

*RandomFIS: a Fuzzy Classification System for Big Datasets(full)*

Jorge Luis Rivero Perez and Bernardete Ribeiro

*Attribute Learning for Network Intrusion Detection(full)*

**11:40-12:00** **Coffee Break**

**12:00-13:15 Session 3: BIG DATA MODELING II (BDM2)**

Chair: Dimitrios Katsaros

Xiaowei Gu, Plamen P. Angelov, German Gutierrez, Jose Antonio Iglesias, Araceli Sanchis  
*Parallel Computing TEDA for High Frequency Streaming Data Clustering(full)*

Kostantinos Demertzis and Lazaros Iliadis

*Adaptive Elitist Differential Evolution Extreme Learning Machines on Big Data:  
Intelligent Recognition of Invasive Species(full)*

Cihan Kucukkececi and Adnan Yazici

*A Graph-Based Big Data Model for Wireless Multimedia Sensor Networks(full)*

**12:00-13:15 Session 4: MACHINE LEARNING ON BIG DATA (MLBD)**

Chair: Grigorios Tsoumakas

Morten Gill Wollsen, John Hallam and Bo Noerregaard Joergensen

*Novel Automatic Filter-class Feature Selection for Machine Learning Regression(full)*

Yoshitsugu Kakemoto and Shinichi Nakasuka

*Learning Symbols by Neural Networks (full)*

Howard Parkinson and Gary Bamford

*Big Data and the Virtuous Circle of Railway Digitization (short)*

**13:15-14:15 Lunch**

**14:15-15:15 Plenary Session 2**

Chair: Rudolf Kruse

Keynote Speaker: Steve Furber, University of Manchester

*Title: The SpiNNaker Project*

**15:15-16:15 Tutorial 1**

Chair: Steve Furber

Giacomo Boracchi, Politecnico di Milano

*Title: Change Detection in Data Streams: Big Data Challenges*

**15:15-16:15 Tutorial 2**

Chair: Piotr Mirowski

Luca Oneto and Davide Anguita, University of Genoa

*Title: Model Selection and Error Estimation without the Agonizing Pain*

**16:15-16:40 Coffee Break**

**16:40-17:40 Plenary Session 3**

Chair: Athena Vakali

Keynote Speaker: Piotr Mirowski, Google Deep Mind

*Title: Learning Sequences*

**20:00-22:30 Conference Dinner**

## Tuesday 25/10/2016

**8:30- Registration**

**9:00-10:00 Plenary Session4**

Chair: Marley Vellasco

Keynote Speaker: Francesco Bonchi, ISI Foundation

*Title: On Information Propagation, Social Influence, and Communities*

**10:00-11:15 Session 5: BIG DATA MEDIA PROCESSING/OPTIMIZATION (BDMPOP)**

Chair: Giacomo Boracchi

Ioannis Mademlis, Anastasios Tefas, Nikos Nikolaidis and Ioannis Pitas

*Compact Video Description and Representation for Automated Summarization of Human Activities(full)*

Nikolaos Passalis and Anastasios Tefas

*Spatial Bag of Features Learning for Large Scale Face Image Retrieval(full)*

Ilias Gialampoukidis, Stefanos Vrochidis and Yiannis Kompatsiaris

*Incremental Estimation of Visual Vocabulary Size for Image Retrieval(full)*

**10:00-11:30 Session 6: WEB-SOCIAL NETWORKS/OPTIMIZATION (WSNO)**

Chair: Francesco Bonchi

Athena Vakali, Nikolaos Kitmeridis and Maria Panourgia

*A Distributed Framework for Early Trending Topics Detection on Big Social Networks Data Threads(full)*

Stamatios Giannoulakis, Nicolas Tsapatsoulis

*Defining and Identifying Stophastags in Instagram(full)*

Spyros Polykalas and George Prezerakos

*Predicting Human Behavior Based on Web Search Activity: Greek Referendum of 2015 (full)*

Hmida Hmida, Sana Ben Hamida, Amel Borgi and Marta Rukoz

*Sampling Methods in Genetic Programming Learners from Large Datasets: A Comparative Study (full)*

**11:30-12:00 Coffee Break**

**12:00-13:15 Session 7: BIG DATA ANALYTICS/OPTIMIZATION (BDAO)**

Chair: Yiannis Kompatsiaris

Danai Triantafyllidou and Anastasios Tefas

*A Fast Deep Convolutional Neural Network for Face Detection in Big Visual Data(full)*

Luca Oneto, Emanuele Fumeo, Giorgio Clerico, Renzo Canepa, Federico Papa, Carlo Dambra, Nadia Mazzino and Davide Anguita

*Delay Prediction System for Large-Scale Railway Networks based on Big Data Analytics(full)*

Asma Al Drees, Reem Bin-Hezam, Ruba Al-Muwayshir, Wafa' Haddoush

*Unified Retrieval Model of Big Data (short)*

**12:00-13:15 Session 8: ONTOLOGIES ON BIG DATA (OBD)**

Chair: Stavros Ntalampiras

Aikaterini Kalou, Dimitrios Koutsomitropoulos

*An Infrastructure and Approach for Inferring Knowledge over Big Data in the Vehicle Insurance Industry(full)*

Michalis Vafopoulos, Ioannis Anagnostopoulos, Dimitrios Negkas, Gerasimos Razis, Georgios Vafeiadis, Ilias Skaros, Kostas Glykos, Aggelos Tzani, Eleftherios Galanos

*Big Data for a Linked Open Economy(full)*

Jingliang Chen, Dmytro Dosyn, Vasyl Lytvyn and Anatoliy Sachenko

*Smart Data Integration by Goal Driven Ontology Learning(full)*

**13:15-14:15 Lunch**

**14:15-15:15 Plenary Session 5**

Chair: Anastasios Gounaris

Keynote Speaker: David Bholat, Bank of England

Title: Big Data at the Bank of England

**15:15-15:40 Coffee Break**

**15:40-17:00 Session 9: MACHINE LEARNING/CHANGE CONTROL (MLCC)**

Chair: Nicolas Tsapatsoulis

Hong-Jun Yoon, Arvind Ramanathan and Georgia Tourassi

*Multi-Task Deep Neural Networks for Automated Extraction of Primary Site and Laterality Information from Cancer Pathology Reports(full)*

Will Serrano

*An Intelligent Internet Search Assistant Based on the Random Neural Network (short)*

Giada Tacconelli and Manuel Roveri

*A CPM-based Change Detection Test for Big Data(full)*

Cesare Alippi, Stavros Ntalampiras and Manuel Roveri

*Designing HMM Models in the Age of Big Data (full)*

**15:40-17:00 Session 10: BIG DATA TOOLS/ANALYTICS (BDTA)**

Chair: Anastasios Tefas

Panagiotis Petridis, Anastasios Gounaris and Jordi Torres

*Spark Parameter Tuning via Trial-and-Error(full)*

Marios Bakratsas, Pavlos Basaras, Dimitrios Katsaros and Leandros Tassioulas

*Hadoop MapReduce Performance on SSDs: The Case of Complex Network Analysis Task(short)*

Talha Oktay and Ahmet Sayar

*Analyzing Big Security Logs in Cluster with Apache Spark(short)*

Burak Köse, Süleyman Eken and Ahmet Sayar

*Playlist Generation via Vector Representation of Songs(short)*

**17:00-17:15 Closing Session**

Chair: Plamen Angelov