PCI 2014
18th Panhellenic Conference in Informatics
HaroKopio University
Athens
October 2-4, 2014
Organized by
Program Brief

**Friday 3/10**

- **08:30 - 09:30** Registration
- **09:30 - 10:30** Keynote: Prof. Panagiotis Metaxas
- **10:30 - 11:00** Coffee Break
- **11:00 - 13:00** Social Networks
- **11:00 - 13:00** MDSD (Special Session)
- **13:00 - 14:00** Lunch Break
- **14:00 - 16:00** Software & Security
- **14:00 - 16:00** SECRET_IDWSE (Special Session)
- **16:00 - 16:30** Coffee Break
- **16:30 - 18:30** Algorithms
- **16:30 - 18:30** Research Project Results
- **18:30 - 19:30** Exhibition: Arduino applications for drone development & programming
- **21:00** Conference Dinner

**Saturday 4/10**

- **10:30 - 11:45** Keynote: Prof. Joseph Sifakis
- **11:45 - 12:15** Coffee Break
- **12:15 - 13:30** NGAHN (Special Session), eGD (Special Session), Hardware
- **13:30 - 14:30** Lunch Break
- **14:30 - 15:15** SPCC (Special Session), BDMK (Special Session)
- **15:15 - 15:45** Coffee Break
- **15:45** Conference Closing
Conference Agenda

Thursday 2/10

13:00 - 14:00  Registration

14:00 - 15:00  Conference Opening

Amphitheater

Invited Speaker

E. Christofilopoulou, Vice Minister of Administrative Reform & e-Governance

15:00 - 15:30  Coffee Break

15:30 - 17:30  Data Mining

Amphitheater

Chair:

Christos Douligeris

An automatic wrapper generation process for large scale crawling of news websites

Iraklis Varlamis, Nikos Tsirakis, Vasilis Pouloupoulos, Panagiotis Tsantilas

An intelligent tool for expediting and automating data mining steps

Ouralia Hatzi, Nikolaos Zorbas, Marios Nikolaidou, Dimitrienis Anagnostopoulos

A Proposed Methodology for e-Business Intelligence Measurement using Data Mining Techniques

Stavros Valsamidis, Ioannis Kazanidis, Sotirios Kontogiannis, Alexandros Karakos

HAT: Hardware design tools & Technologies (Special Session)

Room B1

Chairs:

Georgios Syrakoulis, Yiorgos Tsiatouhas & Minas Dasygenis

Solving AI problems with memristors: A case study for optimal “bin packing”

Dimitrios Statthis, Ioannis Vourkas, Georgios Ch. Sirakoulis

Timing Error Tolerance in Pipeline Based Core Designs

Stefanos Valadimas, Angela Arapoyanni

Designing optimized forward residue number systems IP blocks converters from a network interface

Ioannis Petrousov, Minas Dasygenis

16:00 - 18:00  Rating Systems Vs Machine Learning on the context of sports

George Kyriakides, Kyriacos Talattinis, George Stephanides

Evaluating Low Interaction Honeypots and On their Use against Advanced Persistent Threats (short paper)

Dimitris Fronimos, Emmanouil Magkos, Vassilios Chryssikopoulos

Thursday 2/11

10:30 - 11:00  Coffee Break

Friday 3/10

08:30 - 09:30  Registration

09:30 - 10:30  Keynote

Amphitheater

Prof. Panagiotis Metaxas, Wellesley College, USA

“Why Prediction is Hard: Progress and Obstacles in Computational Social Science”

Chair: Theodora Varvarigou

10:30 - 11:00  Coffee Break
Friday 3/10

11:00 - 13:00

Social Networks

Chair: Mara Nikolaidou

The evolution of privacy-by-default in Social Networks
Alexandra Michota, Sokratis Katsikas
A scalable solution for personalized recommendations in large-scale social networks
Christos Sardianos, Iraklis Varlamis
A Study of Multiple Social Media Use in the European Parliament from an Innovation Perspective
Euripidis Loukis, Yannis Charalabidis, Aggeliki Androustoupoulou
Predicting Tie Strength with the Facebook API
Tasos Spiliatopoulos, Diogo Pereira, Ian Oakley
Towards digital materiality: Imbrication of Services and the re-configuration of agencies (short paper)
George Ktistakis, Demosthenes Akoumianakis
Achieving Autonomicity in IoT systems via Situational-Aware, Cognitive and Social Things (short paper)
Orfeks Voutyras, Spyridon V. Gogouvitis, Achilles Marinakis, Theodora Varvarigou

13:00 - 14:00

Lunch Break

14:00 - 16:00

Software and Security

Chair: Iraklis Varlamis

A cross country comparison on the factors determining OSS diffusion
Spyridoula Lakka, Teta Stamati, Christos Michalakelis
Formal Specification of Open Standards and the Case of RSS v2.0
Konstantinos Barlas, Eleni Berki, Iulia Adomnitza, Thrushna Nalam, Golnaz S. Nejad, Jari Veijalainen, Petros Stefaneas, George Kolotoumis
Designing and developing a free Data Loss Prevention system
Dimitrios Koutsourelis, Sokratis K. Katsikas
Real-time information about public transport’s position using crowdsourcing
Nikos Souliotis, Anargyros Tsadimas, Mara Nikolaidou
Bypassing Antivirus Detection with Encryption (short paper)
Vasilis Tasiopoulos, Sokratis Katsikas

16:00 - 16:30

Coffee Break
Friday 3/10
16:30 - 18:30

Algorithms
Chair:
Christos Michalakelis

Amphitheater

Research Project Results
Room B1

Chairs:
Konstantinos Tserpes, George Dimitrakopoulos

Geometric multigrid methods based on
Generic Approximate Sparse Inverses
George Gravvanis, Christos Filelis-Papadopoulos

Higher Order Finite Difference Scheme for
solving 3D Black-Scholes equation based
on Generic Factored Approximate Sparse
Inverse Preconditioning using Reordering
Schemes
Eleftherios-Nektarios Grylonakis, Christos
Filelis-Papadopoulos, George Gravvanis

Hybrid Parallelization of Standard Full
Tableau Simplex Method with MPI and
OpenMP
Basilis Mamalis, Marios Perlitis

Evaluating modern parallelization tech-
niques on block matching algorithms
Minas Dasygenis, Panagiotis Miliadis

An adaptive score model for a policy-making
education game (short paper)
Anna Xenaki, Konstantinos Tserpes,
Theodora Varvarigou

18:30 - 19:30
Exhibition: Arduino applications for drone
development & programming
Panagiotis Papadopoulos, George Goulis, George Tsagkrinos

21:00
Conference Dinner

Saturday 4/10
9:30 - 10:30
Amphitheater

Keynote
Prof Joseph Sifakis, (ACM Turing Award 2007),
EPFL, President of NCRT
"The Internet of Things - A Revolution not to Miss"
Chair: Socratis Katsikas

10:30 - 11:45

Hardware
Amphitheater

Chair:
Ioannis Voyiatzis

A Floating-Point Paradigm for High-level
Synthesis
Michael Dossis

FPGA Implementations for Volterra DFEs
Andreas Emeretlis, George Theodoridis

Cost Efficient Adaptive Technologies for
High Rate Optical Transmission Systems
Maki Nanou, George-Othon Glentis, Kristina
Georgoulakis, Chris Matrakidis, Christina
(Tanya) Politi, Alexandros Stavdas

11:45 - 12:15
Coffee Break

12:15 - 13:30

NGAHN: Enabling technologies for next
generation access & home networks
(Special Session)
Amphitheater

Chair:
Thomas Kamalakis

Clustering Documents using the 3-Gram
Graph Representation Model
John Violos, Konstantinos Tserpes,
Athanassios Papaokonomou, Magdalini
Kardara, Theodora Varvarigou

Coherent Optical Wireless Systems for High
Speed Local Area Networks with Increased
Resilience
Katerina Margariti, Thomas Kamalakis

18:30 - 19:30
Exhibition: Arduino applications for drone
development & programming
Panagiotis Papadopoulos, George Goulis, George Tsagkrinos

21:00
Conference Dinner
13:30 - 14:30  
Lunch Break

14:30 - 15:15

**SPCC: Security and privacy issues in the Cloud Computing Era (Special Session)**  
**Amphitheater**

*Chair:* Panagiotis Rizomiliotis

- The Rainy Season of Cryptography  
  Aikaterini Latsiou, Panagiotis Rizomiliotis
- A cloud-based architecture to crowdsourcing mobile app privacy leaks  
  Dimitrios Papamartzivanos, Dimitrios Damopoulos, Georgios Kambourakis
- Directions for Raising Privacy Awareness in SNS platforms  
  Konstantina Vemou, Maria Karyda, Spyros Kokolakis

15:15 - 15:45  
Coffee Break

15:45  
Conference Closing

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**BDMK: Big Data, Metadata & Knowledge (Special Session)**  
Room B1

*Chairs:* Christos Papatheodorou & Manolis Gergatsoulis

- Distributed evaluation of XPath queries over large integrated XML data  
  Matthew Damigos, Manolis Gergatsoulis, Eleftherios Kalogerous
- Integrating library and cultural heritage data models: the BIBFRAME - EDM case  
  Sofia Zapoundoulou, Michalis Sfakakis, Christos Papatheodorou
- Intelligent Clouds: A Middleware Architecture Supporting Business Elasticity  
  Vasileios Anagnostopoulos, Vrettos Moulos, Andreas Menychtas, Dora Varvarigou, Anna Gatzoura