

20th Panhellenic Conference on Informatics

10 – 12 November 2016

TEI of Western Greece



PCI 2016

20th Pan-Hellenic
Conference on
Informatics



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Special Sessions Organizers

Mobile Device & Web Software Development – Small Systems Development

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Retrieval & Dissemination of Information

Christos Skourlas, Technological Educational Institute (TEI) of Athens

Nikitas Karanikolas, Technological Educational Institute (TEI) of Athens

Eleni Galiotou, Technological Educational Institute (TEI) of Athens

HuBIC: Human Behaviour, Interaction and Communication

Dr. Spyros Raptis, Research Director, Institute for Language and Speech Processing (ILSP) / “Athena” Research and Innovation Center

Dr. Maria Giagkou, Scientific Associate, Institute for Language and Speech Processing (ILSP) / “Athena” Research and Innovation Center

Dr. Sotiris Karabetzos, Assistant Professor, Dept. of Electronic Engineering, Technological Educational Institute (TEI) of Athens; Scientific Associate, Institute for Language and Speech Processing (ILSP) / “Athena” Research and Innovation Center

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Zaharakis Ioannis, Technological Educational Institute of Western Greece

Keynote Speeches

Keynote Speech I: Temporal Networks and Temporal Graphs

Paul G. Spirakis,

Professor, Patras University (Greece) and U. Liverpool (UK)
President of the European Association for Theoretical Computer Science (EATCS).
Fellow of EATCS.
Member of Academia Europaea.

Abstract

We discuss here recent research by the speaker and others about Networks that change with time and about a nice abstraction for them (Temporal Graphs). This abstraction may model modern communication networks, social nets, transportation networks and even systems of interacting particles in Physics. We discuss causal paths, issues of temporal connectivity, temporal design, temporal exploration and we also propose some further research directions.

Short Bio of Prof. Spirakis

Paul G. Spirakis was born in 1955. He got his undergraduate Electrical Eng. Diploma from NTUA Greece and his MSc and PhD from Harvard University USA. He has been a post-doc at Harvard, then a faculty at NYU - Courant Institute and then a Professor in the Dept. of Computer Eng. and Informatics of Patras University in Greece. He has been the Director of the major Greek Institute CTI from 1996 till Sept. 2016. He is now a Professor of Computer Science in Patras and Liverpool. Paul is working on Algorithms and Complexity. He has done work in the fields of Distributed and Parallel Computing, in Random Graphs, network algorithms and recently in Algorithmic Game Theory. Paul is a Fellow of EATCS, a Member of Academia Europaea and a Member of the ACM Council Europe. Paul is now the President of EATCS and also the Editor in Chief in the Journal Theoretical Computer Science (TCS) in track A. Paul has published significantly in Algorithms and Complexity. Paul has served in many national and European high level bodies including being the Chair of the ERC Panel in Informatics for 2015-16.

Keynote Speech II: Coping with delay defects in deep submicron digital integrated circuits

Spyros Tragoudas, PhD

Professor and Chair

Director, NSF I/UCRC for Embedded Systems, SIUC site

Electrical and Computer Engineering Department

Southern Illinois University Carbondale

Abstract

Testing for delay defects is increasingly challenging in digital integrated circuits. Complex fault models must be used for the generation of input stimuli. Scalable automatic test pattern generation methods are presented, and approaches that identify the location of embedded delay defects are outlined.

Short Bio of Prof. Tragoudas

Spyros Tragoudas (BSc 1986, MSc 1988, PhD 1991) is a Professor and Department Chair at the Electrical and Computer Engineering (ECE) Department, Southern Illinois University at Carbondale (SIUC), and the Director of the National Science Foundation (NSF) Industry University Cooperative Research Center (IUCRC) on Embedded Systems at the SIUC site. He has held prior appointments with the faculty of the ECE Department at the University of Arizona, and with the faculty of the Computer Science Dept. at SIUC. His current research interests are in the areas of VLSI Design and Test Automation and embedded systems. Dr. Tragoudas has published over eighty papers in journals and over hundred and fifty papers in peer-reviewed conference proceedings in these areas, and has received four outstanding paper awards for research in VLSI Testing. His research has been funded from federal agencies and industry. He has served and is currently serving on the editorial board of several journals, the technical program committees of many conferences, was the program chair of the DFTS'09, and the general chair of DFTS'10 and DFTS'17.

Special Sessions

Mobile Device & Web Software Development –Small Systems Development

MDSO 2016 organizers want to provide an international forum for researchers, professionals, and industrial practitioners to share their knowledge in the rapidly growing area of software development technologies for Mobile devices, Web Information Systems and Small-Systems Development. According to the organizers knowledge, there are no other conferences that combine software development technologies for the domains of Mobile devices, Web and Small-Systems.

Topics

- Mobile devices software development platforms
 - Location/Context-aware mobile applications
 - Navigation mobile applications
 - Social networking mobile software
 - Mobile applications user interfaces
 - Ubiquitous mobile devices computing
 - Energy saving mobile software
 - Software development for limited resources mobile devices
 - Sensor based mobile applications
 - Security and privacy issues of mobile software
 - Mobile cloud computing applications
 - Cross-platform mobile software development
 - Data management for mobile applications
 - E-learning mobile applications
 - Distributed computing applications in mobile environments
 - Rapid Application Development for Mobile Devices
 - Applications in Mobile Commerce
 - Medical Informatics Applications for Mobile Devices
 - Personalization of Mobile and Web software
 - Mobile and Web micro payments
 - Mobile and Web government applications
 - Mobile Web services development
 - Architecture & Design of Mobile and Web Software Systems
 - Build and Deployment processes of Mobile and Web Software Systems
 - Cross-Technology Integration and Tools for Mobile and Web Software
 - Server tuning of Mobile and Web Software Systems
-
- CFML (ColdFusion Markup Language)
 - HTML5 development

- comet technologies
- websockets development
- semantic web
- Avoiding full web page reloads
- PHP Frameworks
- CFML Frameworks
- ease web development
- Client-side Frameworks
- Client-side Libraries
- single-page applications (SPA)
- real-time web applications
- internet of things
- web of things
- sensor networks and applications
- sensor data visualisation
- pervasive computing and applications
- pervasive healthcare
- big data applications
- mobile crowdsourcing
- mobile applications for single board systems
- Single-board computers / Low-cost systems for Homes
- Single-board computers / Low-cost systems in Agriculture
- Single-board computers / Low-cost systems in Education
- Single-board computers / Low-cost systems in Industry
- Single-board computers / Low-cost systems in Medicine
- Metrology and applications

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University of Thessaly
- Ioannis Voyiatzis, Assistant Professor,
Department of Informatics,
Technological Educational Institute of Athens

HuBIC - Human Behaviour, Interaction and Communication

HuBIC 2016 focuses on the interplay of the different modalities involved in human behavior when interacting with physical objects, technology and other people. This wide, interdisciplinary field spans from capturing and analysis to modeling and generation of embodied behavior in the context of communication, learning or entertainment.

The HuBIC 2016 special session invites for leading-edge research and experimentation in topics ranging from Human-Computer Interaction to Human Social Behavior. HuBIC 2016 provides the opportunity to present and discuss the state-of-the-art in capturing, analyzing, modelling and generating multimodal behavior signals, including signals conveying information from face and body motion, eye-tracking, speech, audio and video, biosensors and more, as well as their fusion and fission and their exploitation in modeling the human communicative behavior as well as building systems and interfaces for advanced, believable, natural, human-like interaction.

Topics

Topics of interest include, but are not limited to:

- Human computer interaction as well as human-robot and innovative interaction techniques
- Affective and human-centered pervasive computing
- Multimodal interaction and multimodal communicative and social behaviours; study and modelling the human communicative behaviour, multiparty interactions, dialogue analysis and modelling etc.
- Affective dialogues with artificial embodied systems; humanoid robots, virtual agents, avatars, artificial human-like characters etc.
- Capture, analysis and generation of multimodal and multisensory data to imitate human verbal and bodily behaviours
- Learning and reading comprehension; adaptive learning, physiological data capturing and cognitive correlates, learning analytics
- Speech interaction and communication; expressive, multimodal and audio-visual speech synthesis
- Sign Language Processing; modelling, recognition and generation

Scientific Committee

- Dr. Samer Al Moubayed, KTH Royal Institute of Technology
- Dr. Eleni Efthimiou, Research Director, Institute for Language and Speech Processing (ILSP) / "Athena" Research and Innovation Center
- Dr. Anna Esposito, Associate Professor in Computer Science/Department of Psychology, Second University of Naples (SUN)
- Dr. Stavroula-Evita Fotinea, Research Director, Institute for Language and Speech Processing (ILSP) / "Athena" Research and Innovation Center
- Dr. Vangelis Karkaletsis, Research Director /Institute of Informatics and Telecommunications /NCSR "Demokritos"
- Dr. Akrivi Katifori, Researcher/Management of Data, Information, and Knowledge Group (MaDgIK), Dept. of Informatics & Telecommunications, University of Athens
- Dr. Maria Koutsombogera, Research Fellow/School of Computer Science and Statistics (SCSS), Trinity College Dublin
- Stefanos Nikolaidis, Research Assistant/ Robotics Institute, Carnegie Mellon University (CMU)
- Dr. Harris Papageorgiou, Principal Researcher/Institute for Language and Speech Processing (ILSP) / "Athena" Research and Innovation Center
- Dr. Katerina Pastra, Director/Cognitive Systems Research Institute (CSRI)
- Dr. Costas Tzafestas, Assistant Professor of Robotics/School of Electrical and Computer Engineering, National Technical University of Athens (NTUA)

Retrieval and Dissemination of Information

As mobile devices are enhanced continuously with more resources, wireless infrastructures provide support to a growing number of specific purpose environments. Advances on sensor technology, wireless environments, Information Retrieval, Personalization, and Content Based Image Retrieval introduce new possibilities in various sectors, realizing the anytime-anywhere access to multimedia information. This Special Session investigates Retrieval and Dissemination of Information (text and image) in various environments. Special attention is given for Secure, Distributed and Wireless specific purpose Environments. The RDI session aims at providing researchers and professionals with an insight on:

- Wireless architectures to enable authorized users to access sensitive information in a secure and transparent manner.
- Policy-based architectures utilizing wireless sensor devices, advanced network topologies and software agents.
- Applications related to remote monitoring of patients, elderly people, etc.
- Evaluation and Integration of Information Retrieval and Personalization techniques.
- Text Retrieval, and Content Based Image Retrieval techniques.
- Classification based on various techniques e.g. neural network techniques, fuzzy techniques, and its applications.

Topics

- Security issues in IT applications. Benchmarks and evaluation of the applications
- Specific purpose Wireless architectures
- Agent based architectures. Transparent Information transfer using intelligent agents.
- Authentication and information access and retrieval in ad-hoc networks and self-organized networks
- Policies and policy-based architectures
- Novel methods for Text Retrieval, personalization, and Content Based Image Retrieval and application in specific purpose environments
- Transparent and secure communication in distributed environments
- Advanced remote medical treatment services through pervasive environments- Remote monitoring of patients and elderly people
- Neural network techniques and its applications e.g. SVM based systems that support diagnosis

RDI 2016 Program Committee

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- Vassilis Kaburlasos, TEI of Kavala
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- Vasilis Tampakas, TEI of Patras
- Michael Vassilakopoulos, University of Central Greece

Program Brief

Thursday 10/11

12:00 - 13:30

Registration

13:30 - 14:00

Opening

14:00 - 15:00

Keynote I
Paul G. Spirakis

15:00 - 15:30

Coffee Break

15:30 - 17:00

Algorithms -
Optimization

Health
Management
Systems

Signal Processing

17:00 - 18:30

Learning
Technologies

Financial
Applications

Hardware
Systems I

Friday 11/11

9:30 - 10:30

Keynote II
Spyros Tragoudas

10:30 - 11:00

Coffee Break

11:00 - 12:30

Accessibility
Engineering

Algorithms –
Textual
Analysis

Networks I

12:30 - 13:30

Lunch

13:30 - 15:00

Human –
Computer
Interaction

Special Session:
MDS

Networks II

15:00 - 15:30

Coffee Break

15:30 - 17:00

Special Session
HuBIC I

Special Session:
RDI I

Security I

17:00 - 18:30




Special Session
HuBIC II

Special Session:
RDI II

Hardware
Systems II

Saturday 12/11

9:30 - 10:30	Data Analytics	Web Technologies	
10:30 - 11:00	Coffee Break		
11:00 - 12:30	Algorithms – Scientific Computing	Enterprise Systems	Security II
12:30 - 13:30	Lunch		
13:30 - 15:00	Games Development	Social Networks	
15:00 - 15:30	Closing		

-  Room 1 – Sokratis
-  Room 2 - Aristotelis
-  Room 3 – Congress Hall

Conference Agenda

Thursday 10/11

12:00 – 13:30 **Registration**

13:30 - 14:00 **Conference Opening Salutations**

14:00 - 15:00 **Keynote I: Paul G. Spirakis**

Patras University (Greece) and U. Liverpool (UK)

Temporal Networks and Temporal Graphs

Chair: Triantafilou Vassilios

15:00 - 15:30 **Coffee Break**

15:30 – 17:00 **Session 1 (Room 1, Room 2, Room 3)**

Algorithms - Optimization

Room 1

Chair: Panayiotis Alefragis

An Optimization Model for the Strategic Design of a Bicycle Sharing System: A Case Study in the City of Athens

Alexandros Angelopoulos, Damianos Gavalas, Charalampos Konstantopoulos, Damianos Kypriadis and Grammati Pantziou

Highway Rest Areas simultaneous energy optimization and user satisfaction

Jordanis Xanthopoulos, George Goulas, Christos Gogos, Panayiotis Alefragis and Efthymios Housos

Dynacargo: The evaluation results of a Dynamic Waste Collection Management System based on Real-time and Forecasted Data

George Asimakopoulos, Sotiris Christodoulou, Panayiotis Alefragis, Andreas Gizas and Vassilios Triantafilou

Health Management Systems

Room 2

Chair: Nikolaos Voros

A Personalised Monitoring and Recommendation Framework for Kinetic Dysfunctions: The Trendelenburg Gait

Nikolaos Michalopoulos, Theofilos Chrysikos, Michail Mamalakis, Christina Katsini, George Raptis and Andrew Vigotsky

Evaluation of IoT-based Distributed Health Management Systems

Konstantinos Karamitsios, Theofanis Orphanoudakis and Tasos Dagiuklas

Designing the Next Generation of Home Automation Combining IoT and Robotic Technologies

Konstantinos Christopoulos, Alexandros Spournias, Theofanis Orfanoudakis, Christos Antonopoulos and Nikolaos Voros

Signal Processing

Room 3

Chair: Michael Paraskevas

Signal Processing Techniques Restructure the Big Data Era

Charilaos Petrou and Michael Paraskevas

Algorithms for lossless compression in image processing systems

Bogdan Popa

Innovative Computing Systems in Volume Rendering for the Medical Images

Bogdan Popa

Sound and kinesthesia in virtual environments: pilot experiment to compare physical and digital sound contradictions

David Triantafyllou, Angeliki Antoniou and George Lepouras

17:00 - 18:30 **Session 2 (Room 1, Room 2, Room 3)**

Learning Technologies

Room 1

Chair: Cleo Sgouropoulou

Educational capabilities of a novel teleconference service integrated into the Greek school community

Isidoros Perikos, Zarouchas Thomas, Vasileios Gkamas and Michael Paraskevas

A framework for the evaluation of multilayer web based learning

Elias Gounopoulos, Sotirios Kontogiannis, Ioannis Kazanidis and Stavros Valsamidis

A closer look at MOOC's adoption from a qualitative perspective

Bill Vassiliadis, Achilles Kameas and Cleo Sgouropoulou

An interactive tool for teaching and learning database normalization

Christos Stefanidis and Georgia Koloniari

Fuzzy Grading for Adaptability in a Learning Platform

Kiki Hatzistavrou, George Kakarontzas and Lefteris Angelis

Financial Applications

Room 2

Chair: Vassilios Tampakas

Semi-supervised forecasting of fraudulent financial statements

Stamatis Karlos, Nikos Fazakis, Sotiris Kotsiantis and Kyriakos Sgarbas

Going Beyond the Coinbase Transaction Fee: Alternative Reward Schemes for Miners in Blockchain Systems

Harald Gjermundrod, Konstantinos Chalkias and Ioanna Dionysiou

Stock Price Forecasting via Sentiment Analysis on Twitter

John Kordonis, Symeon Symeonidis and Avi Arampatzis

Hardware Systems I

Room 3

Chair: Nikolaos Voros

Characterization of hardware in self-managing self-organizing Cloud environment

Christos Filelis-Papadopoulos, Eleftherios-Nektarios Grylonakis, Panagiotis Kyziropoulos, George Gravvanis and John Morrison

A Co-Design Approach For Rapid Prototyping Of Image Processing On SoC FPGAs

Ioannis Stratakos, George Lentaris, Konstantinos Maragos, Dionysios Reisis and Dimitrios Soudris

A Data Acquisition System based on high sampling rate oscilloscopes

Georgios Bourlis, Theodoros Avgitas, Antonios Leisos, Ioannis Manthos, Apostolos Tsirigotis and Spyros Tzamarias

Friday 11/11

9:30 - 10:30 **Keynote II: Spyros Tragoudas**

Southern Illinois University Carbondale

Coping with delay defects in deep submicron digital integrated circuits

Chair: Vassilios Tampakas

10:30 - 11:00 **Coffee Break**

11:00 - 12:30 **Session 3 (Room 1, Room 2, Room 3)**

Accessibility Engineering

Room 1

Chair: Sotiris Christodoulou

Enhancing the accessibility of e-learning platforms through synthetic speech

Spyros Raptis and Panos Kakoulidis

Promoting Active Learning using a web-based Audience Response System

Christoforos Karachristos, Elias Stavropoulos, Vassilios Verykios, Fotis Lazarinis and Evangelos Sakkopoulos

Icon Design for Landmark Importance in Mobile Maps

Dionisia Lioli and Andreas Komninos

Usability of Visibly Adaptive Smartphone keyboard layouts

Apostolos Gkoumas, Andreas Komninos and John Garofalakis

Algorithms – Textual Analysis

Room 2

Chair: Nikitas Karanikolas

A semi-automatic system for the consolidation of Greek legislative texts

John Garofalakis, Konstantinos Plessas and Athanasios Plessas

Sentiment Analysis for the Greek Language

Nikolaos Spatiotis, Iosif Mporas, Michael Paraskevas and Isidoros Perikos

Development and Enhancement of a Stemmer for the Greek Language

Georgios Ntais, Spyridon Saroukos, Eleni Berki and Hercules Dalianis

Towards Automatic Structuring and Semantic Indexing of Legal Documents

Marios Koniaris, George Papastefanatos and Yannis Vassiliou

Networks I

Room 3

Chair: Christos Douligeris

Comparison of simplified FWM expressions for coherent optical systems in both dispersion managed and un-managed fiber links

Dimitris Uzunidis, Chris Matrakidis and Alexandros Stavdas

Optimizing power, capacity, transmission reach and amplifier placement in coherent optical systems using a physical layer model

Dimitris Uzunidis, Chris Matrakidis and Alexandros Stavdas

Experimentation on low delay and stable congestion control for P2P video streaming

Nikolaos Efthymiopoulos, Maria Efthymiopoulou and Athanasios Christakidis

12:30 - 13:30 **Lunch**

13:30 - 15:00 **Session 4 (Room 1, Room 2, Room 3)**

Human – Computer Interaction

Room 1

Chair: Michalis Xenos

Automated hand gesture recognition for educational applications

Vangjel Kazllarof, Stamatis Karlos, Angeliki-Panagiota Panagopoulou and Sotiris Kotsiantis

Using eye tracking to identify cognitive differences: a literature review

George E. Raptis, Christos Fidas and Nikolaos Avouris

An eye-tracking study of web search interaction design patterns

Dimitra Dimitrakopoulou, Evanthia Faliagka and Maria Rigou

Special Session: Mobile Device & Software Development – Small Systems Development

Room 2

Chair: Nikitas Karanikolas

iGQL: An Intelligent NoSQL Graphical Query Language

Ilias Nektarios Seitanidis, Georgios Charitakis and Euclid Keramopoulos

Performance Evaluation of Batch Encodings in HEVC Using Slice Level Parallelism

Panos Papadopoulos, Maria Koziri, Nikolaos Tziritas, Thanasis Loukopoulos, Ioannis Anagnostopoulos and Georgios Stamoulis

Multi-device interactions for teamwork in ubiquitous, collaborative and distributed contexts

Demosthenes Akoumianakis, George Vellis, Dimitrios Kotsalis and Jean Vanderdonckt

Networks II

Room 3

Chair: Michael Paraskevas

QoS-Based Allocation Cooperative Mechanism for Spectrum Leasing in Overlay Cognitive Radio Networks

Anargyros J. Roumeliotis and Athanasios D. Panagopoulos

Software Defined Networks: A case for QoS implementation at the Greek School Network

John Christodoulopoulos, Michael Paraskevas and Vasileios Triantafyllou

Topology experimentation in a Zigbee wireless sensor network

Maria Dimou, Theofilos Kossyvakis, Charalampos Liolios, Costas Chaikalis, Konstantinos Tsoukatos and Vasileios Vlachos

15:00 - 15:30 **Coffee Break**

15:30 - 17:00 **Session 5 (Room 1, Room 2, Room 3)**

Special Session: HuBIC I – Human Behaviour, Interaction and Communication I

Room 1

Chair: Sotiris Karabetsos

From capturing to generating human behavior: closing the interaction loop at the HUBIC Lab

Spyros Raptis and Maria Giagkou

The MOBOT Human-Robot Interaction – Showcasing Assistive HRI

Stavroula-Evita Fotinea, Eleni Efthimiou, Theodore Goulas, Athanasia - Lida Dimou, Costas Tzafestas and Vassilis Pitsikalis

MagichOLO - A Collaborative 3D experience in the museum

Aristotelis Kasomoulis, Akrivi Katifori, Maria Vayanou and Yannis Ioannidis

Special Session: Retrieval & Dissemination of Information I

Room 2

Chair: Nikitas Karanikolas

Building Stemmers for the Polish Language

Nikitas Karanikolas

Research Publication Recommendation System based on a Hybrid Approach

Anastasios Tsolakidis, Evangelia Triperina, Cleo Sgouropoulou and Nick Christidis

Smoothing Class Frequencies for KNN Medical Article Classification

Kostas Fragos and Christos Skourlas

Security I

Room 3

Chair: Ioannis Voyiatzis

Security and Usability in Knowledge-based User Authentication: A Review

Christina Katsini, Marios Belk, Christos Fidas, Nikolaos Avouris and George Samaras

A study of lightweight block ciphers in TLS - The case of Speck

Efthymios Iosifidis and Konstantinos Limniotis

Ontological Templates for Modelling Security Policies in Cloud Environments

Simeon Veloudis and Iraklis Paraskakis

17:00 - 18:30 **Session 6 (Room 1, Room 2, Room 3)**

Special Session: HuBIC II – Human Behaviour, Interaction and Communication II

Room 1

Chair: Spyros Raptis

Affective word ratings for concatenative text-to-speech synthesis

Pirros Tsiakoulis, Spyros Raptis, Sotiris Karabetsos and Aimilios Chalamandaris

Exploring Visualizations in Real-time Motion Capture for Dance Education

Tsambounaris Georgios, Katerina El Raheb, Akrivi Katifori and Yannis Ioannidis

Special Session: Retrieval & Dissemination of Information II

Room 2

Chair: Nikitas Karanikolas

Querying Greek Governmental Site using SPARQL

Pavlina Fragkou, Nikolaos Kritikos and Eleni Galiotou

Evaluating Clustering Algorithms on a Multimedia Metadata Dataset

Christina Kyrkou, Phivos Mylonas, Evaggelos Spyrou and Spyros Sioutas

Hardware Systems II

Room 3

Chair: Aristogiannis Garbis

Software-based SIC pair Generation

Ioannis Voyiatzis, Costas Efstathiou and Kyriakos Patriarcheas

Performance Evaluation of Tetris-based Legalization Heuristics

Antonios Dadaliaris, Evangelia Nerantzaki, Maria Koziri, Panagiotis Oikonomou, Thanasis Loukopoulos and Georgios Stamoulis

An Interactive MESI Cache Coherence Simulator for Educational Purposes

Dimitris Kehagias and Ioannis Raptis

Low Cost Boolean Function generation

Ioannis Voyiatzis, Costas Efstathiou

Saturday 12/11

9:30 - 10:30 **Session 7 (Room 1, Room 2)**

Data Analytics

Room 1

Chair: Christos Pierrakeas

Spatial and Spatio-Textual Self joins on Apache Hadoop

Athanasios Kordelas, Evangelos Theodoridis and Athanasios Tsakalidis

An Investigation on the Application Developer Attitude Towards Greek Open Government Data

Athanasios Plessas and Ioanna Dionysiou

Weighting Public Mood via Microblogging Analysis

Andreas Kanavos, Stellatos Metaxas and Athanasios Tsakalidis

Web Technologies

Room 2

Chair: Sotiris Christodoulou

User profile extraction engine

Kleanthis Gatziolis and Anthony C. Boucouvalas

Evolution of method invocation and object instantiation pattern in PHP ecosystem

Panos Kyriakakis, Alexander Chatzigeorgiou, Apostolos Ampatzoglou and Stelios Xinogalos

10:30 - 11:00 **Cofee Break**

11:00 - 12:30 **Session 8 (Room 1, Room 2, Room 3)**

Algorithms -Scientific Computing

Room 1

Chair: Panayiotis Alefragis

A note on the convergence rate of a class of Approximate Sparse Inverse Matrix Methods

Christos Filelis-Papadopoulos, George Gravvanis and Elias Lipitakis

A Hybrid Parallelization Scheme for Standard Simplex Method based on CPU/GPU Collaboration

Basilis Mamalis and Marios Perlitis

Graph-structured Watermarking using Bitonic Sequences of Self-inverting Permutations

Anna Mpanti and Stavros Nikolopoulos

On the Multi-Level Near-Complete Decomposability of a Class of Multiprocessing Systems

Athanasios N. Nikolakopoulos and John Garofalakis

Enterprise Systems

Room 2

Chair: Vassilios Tampakas

A Comprehensive Approach for Implementing an Open Source ERP in a Greek Industry

Niki Kountouridou, Panagiota Antoniou and Ioannis Stamelos

Migrating eGovernment Services in the cloud: A capability modelling approach

Evangelos Gongolidis, Evangelia Kavakli, Pericles Loucopoulos and Christos Kalloniatis

A BCI-based approach for controlling a flying drone in real time

Konstantinos Markopoulos, Christos Mavrokefalidis, Kostas Berberidis and Efi Daskalopoulou

ERP, e-commerce, Social Media and Absorptive Capacity of greek Firms - An Empirical Investigation

Euripidis Loukis, Spyros Arvanitis, Niki Kyriakou, Anna Famelou, Michail Marios Chatzianastasiadis and Fotini Michailidou

Security II

Room 3

Chair: Paris Kitsos

An Efficient Reconfigurable Ring Oscillator for Hardware Trojan Detection

Filippos Pirpilidis, Artemios G. Voyiatzis and Paris Kitsos

Security and Efficiency Analysis of One Time Password Techniques

Ioannis Tzemos, Apostolos Fournaris and Nicolas Sklavos

A Framework for Threat Detection in Communication Systems

Dimitrios Sisiaridis, Fabrizio Carcillo and Olivier Markowitch

12:30 - 13:30 **Lunch**

13:30 - 15:00 **Session 9 (Room 1, Room 2)**

Games Development

Room 1

Chair: Ioannis Zaharakis

Development and evaluation of an exergaming application for improving senior's well-being

Chaido Kostaki and Christos Goumopoulos

A Review on Location Based Services for Mobile Games

Spyros Xanthopoulos and Stelios Xinogalos

An adaptive mobile casual game for practicing multiplication

Angeliki Leonardou and Maria Rigou

Implementing Game Mechanics with GoF Design Patterns

Xeni-Christina Kounoukla, Apostolos Ampatzoglou and Konstantinos Anagnostopoulos

Social Networks

Room 2

Chair: Cleo Sgouropoulou

Solving Influence Problems on the DeGroot Model with a Probabilistic Model Checking Tool

Sotirios Gyftopoulos, Pavlos Efrimidis and Panagiotis Katsaros

Self-disclosure, Privacy concerns and Social Capital benefits interaction in Facebook: A case study

Eleni Tzortzaki, Angeliki Kitsiou, Maria Sideri and Stefanos Gritzalis

Testing scalability and performance of decentralized on-line social networks

Georgios Spathoulas, Konstantinos Goutsias and Ioannis Anagnostopoulos

15:00 - 15:30 **Conference Closing**

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