# PROGRAM

## 11<sup>th</sup> IEEE INTERNATIONAL CONFERENCE ON COMPUTER AND INFORMATION TECHNOLOGY CIT 2011

## 11<sup>th</sup> IEEE INTERNATIONAL CONFERENCE ON SCALABLE COMPUTING SCALCOM 2011

Paphos, Cyprus August 31 – September 2, 2011



HOSTED BY

University of Cyprus CYPRUS

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## CIT 2011 & SCALCOM 2011

#### Introduction

CIT has become a major platform for researchers and industry practitioners from different fields of computer and information technology. Each year, CIT attendees appreciate and benefit from multidisciplinary exchanges in computer and information technology. In previous years, CIT has attracted many high quality research papers spanning over the various aspects of information technology, computing science and computer engineering. These papers highlight foundational work that strives to push beyond limits of existing computer technologies, including experimental efforts, innovative systems, and investigations that identify weaknesses in existing IT services.

Scalability is a desirable quality for contemporary and future computing and communication systems and becomes one of the most important considerations during the design and deployment of these systems. With the rapid increases in the information volume and system complexity, new architecture and techniques are required to support the scalable computing and communications.

The conference SCALCOM 2011 aims to provide an international forum for scientists, researchers and engineers to discuss challenges, launch original ideas, and showcase real-world problems on all aspects of scalability. SCALCOM 2011 is soliciting original and previously unpublished papers addressing research challenges and advances towards the design, implementation and evaluation of scalable computing and communication systems.

CIT 2011 is held together with SCALCOM 2011. CIT 2011 offers a full program divided over a 3-day technical program. The conference received many submissions but in order to maintain quality, we have accepted approximately 29% of the papers submitted to the conference. The event also counts with 3 satellite workshops and 2 Keynote Speakers. The technical program starts every day at 9:00.

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### **KEYNOTE SPEAKERS**

#### Dr Azamat Abdoullaev

EIS Encyclopedic Intelligent Systems, Cyprus



AZAMAT ABDOULLAEV. From 1975 to 1981, Azamat Abdoullaev was а postgraduate and research associate at the USSR Academy of Sciences, the Institute of Physics (Moscow, USSR), one of the leading world research

institutions.

From 1983 to 1991, a research scientist at the Institute of Scientific and Technical Information at the USSR Academy of Sciences and the Government Committee in Scientific and Technical Information of the USSR Council of Ministers. In 1988, he received a scientific degree in physics and mathematics conferred by the USSR Academy of Sciences, the Lebedev's Institute of Physics, Moscow.

1989, Dr Azamat Abdoullaev published In 'Introduction into Information World'. The book pioneered the role of global and unified ontology in building the Information World of advanced largeknowledge systems, as scale all-purpose encyclopedic intelligent systems, the engines of knowledge-based societies and innovation networks. Presently, core ontologies, as reference world/data models and fundamental form of knowledge and reasoning representation, are key concepts and tools in information sciences. computing, bioinformatics, artificial intelligence, software engineering, the semantic web, or strategic computing technologies. In 1990-1993, he received an academic funding from the USSR Academy of Sciences, initiating the Encyclopedic Knowledge Base in Physical Sciences.

From 1993 up to date, Dr A. Abdoullaev is Director and Chief Research Scientist of a Russian company, OOO "Entsiklopedicheskiye Intellectualniye Systemy" (Moscow). With its sister international company, EIS Encyclopedic Intelligent Systems Ltd, both entities aim to play a visible role in the emerging global market of intelligent/smart cities, contributing into building a Smart World of Sustainable Communities.

As ontologist, Azamat Abdoullaev introduced a common world schema, a standard ontology/semantics for human beings and computing machines, to be applied as a unified web ontology.

In all, he is originally involved in several innovative enterprises and frontier research programs, such as:

- Ontopaedia, Unified Standard Entity Classification System (USECS), a Global Web Ontology
- Integrated Model of Science, Arts and

Technology

- Intelligent Eco Cities (Standard Development Framework)
- Smart World of Sustainable Communities
- Executive Education Programs in Smarter World and Sustainable Cities

As the latest international sustainable urban projects, he was instrumental to launch the first intelligent eco city ab novo in Europe, trademarked as "Neapolis Smart EcoCity", within the framework of Smart Eco Pafos and Smart/Sustainable Cyprus, to be considered by the national and local governments as the Regional and National Development Plans, respectively.

In addition, Dr Azamat Abdoullaev is promoting the integrated models of "Intelligent Europe", "Sustainable Russia", and "Smart Sustainable World".

#### **Professor Kleanthis Psarris**

The University of Texas at San Antonio, USA



KLEANTHIS PSARRIS is Professor and Chair of the Department of Computer Science at the University of Texas at San Antonio. He received his B.S. degree in Mathematics from the

National University of Athens, Greece in 1984. He received his M.S. degree in Computer Science in 1987, his M.Eng. Degree in Electrical Engineering in 1989 and his Ph.D. Degree in Computer Science in 1991, all from Stevens Institute of Technology in Hoboken, New Jersey. His research interests are in the areas of Parallel and Distributed Systems, Programming Languages and Compilers, and High Performance Computing. He has designed and implemented state of the art program analysis and compiler optimization techniques and he developed compiler tools to increase program parallelization and improve execution performance on advanced computer architectures. He has published extensively in top journals and conferences in the field and his research has been funded by the National Science Foundation and the Department of Defense. He is an Editor of the Parallel Computing journal. He has served on the Program Committees of several international conferences including the ACM International Conference on Supercomputing (ICS) in 1995, 2000, 2006 and 2008, the IEEE International Conference on High Performance Computing and Communications (HPCC) in 2008, 2009 and 2010, and the ACM Symposium on Applied Computing (SAC) in 2003, 2004, 2005 and 2006.

#### WEDNESDAY KEYNOTE ADDRESS

Data Dependence Analysis Techniques for Multi-core Architectures

Prof. Kleanthis Psarris

WEDNESDAY AUGUST 31, 2011, 9:30 - 10:30

#### ROOM LEDA

#### ABSTRACT

In multi-core architectures large scale scientific applications have to be redesigned to efficiently use the multiple cores and deliver higher performance. Optimizing compilers rely upon program analysis techniques to detect data dependences between program statements, perform optimizations, and identify code fragments that can be executed concurrently. However, most data dependence tests are only able to analyze linear expressions, even though non-linear expressions occur frequently in practice. Therefore, considerable amounts of potential parallelism remained unexploited. In order to handle such complex instances of the dependence problem and increase program parallelization we developed new program analysis techniques. Our methods are based on a set of polynomial time techniques that can prove or disprove dependences in source codes with nonlinear and symbolic expressions, complex loop bounds, arrays with coupled subscripts, and if-We statement constraints. performed an experimental evaluation of several data dependence tests and we compared them in terms of data dependence accuracy, compilation efficiency. effectiveness in parallelization and program execution performance. We run various experiments using the Perfect Club Benchmarks, the SPEC benchmarks, and the scientific library Lapack. We measured the accuracy and efficiently of each data dependence test. We also determined the impact of each data dependence test on the total compilation time. Finally, we measured the number of loops parallelized by each test and we compared the execution performance of each benchmark on a multi-core architecture. The experimental results indicate that our dependence analysis tool is accurate, efficient and more effective in program parallelization than past data dependence analysis techniques. The improved parallelization resulted into higher speedups and better program execution performance in several benchmarks.

#### A Smart World: A Development Model for Intelligent Cities Dr. Azamat Abdoullaev

Dr. Azamat Abdoullaev

THURSDAY SEPTEMBER 1, 2011, 9:30 – 10:30

#### ROOM LEDA

#### ABSTRACT

The 21st century smart sustainable development suggests the wholly new principles, strategies, and elements of sustainable living: a new set of ecointelligent world strategies, models, policies, and solutions. It's when the sustainable world's intelligent urbanism is synergistically driven by natural capital, social capital and digital capital, like as the Internet/Web of Things, Knowledge and Social Intelligence and Renewable Energy Sources.

A genuine sustainable community is consistently defined as digitally smart, socially intelligent, and ecologically sustainable.

At the global level, the Smart World is modeled as a Smart Eco Planet of intelligent sustainable communities: countries, regions, cities, towns, villages, districts, and neighborhoods. The Smart Eco Planet is then all as about intelligent communities, smart natural ecosystems, digital smart economy, intelligent people, digital smart governance, smart transport and intellectual ICTs, eco-environments, eco-smart living and creative working in intelligent eco-buildings, cities, regions, countries, and global knowledge ecosystems.

A true Smart Sustainable City is accordingly redefined as an urban entity or city pattern with three critical parts/layers/levels/spaces, all planned, developed and managed as its integrated elements:

- Digital / ICT / Hi-Tech / Ubiquitous / Cyber City (Digital / Information Capital; Multi-Play Telecom Network, ICT spaces / systems / applications, Ubiquitous Computation, Network-integrated Real Estate, Virtual Lifestyle);
- Sustainable / Ecological / Green / Zero-Carbon / Zero-Waste / Eco Friendly / Solar City (Natural Capital; Green Energy Network, Real Eco Estate, Green Lifestyle);
- Knowledge / Learning / Innovation / Intelligent / Science / Intellectual / LivingLab / Creative / Human City / Noopolis (Knowledge Capital; Knowledge Triangle / Square / Grid / Ecology, Intelligent/Smart Lifestyle).

Modeled as the fully sustainable city, the Smart/Intelligent Eco City's concept, design, planning and implementation is moving further on the Europe 2020 strategic priorities of smart sustainable and inclusive growth.

## SCHEDULE AT A GLANCE

## WEDNESDAY AUGUST 31, 2011

08:00 - 18:00	REGISTRATION
09:00 - 09:30	OPENING REMARKS
09:30 - 10:30	KEYNOTE ADDRESS: KLEANTHIS PSARRIS
10:30 - 11:00	COFFEE BREAK
11:00 - 12:30	SCALCOM 1: NETWORKING AND APPLICATIONS
	P2P-RDM WORKSHOP
12:30 - 14:00	LUNCH BREAK
14:00 - 15:30	SCALCOM 2: PARALLEL AND CLOUD COMPUTING
	DSOC WORKSHOP
15:30 - 16:00	COFFEE BREAK
16:00 - 17:30	CIT 1: GRAPHICS & IMAGE PROCESSING CIT 2: COMPUTER ARCHITECTURE & NETWORKS
20:00 - 22:00	WELCOME COCKTAIL: HOTEL TERRACE

## THURSDAY SEPTEMBER 1, 2011

08:00 - 18:00	REGISTRATION
09:30 - 10:30	KEYNOTE ADDRESS: PROF. DR. AZAMAT ABDOULLAEV
10:30 - 11:00	Coffee Break
11:00 - 12:30	CIT 3: COMPUTER NETWORKS CIT 4: GRAPHICS AND IMAGE PROCESSING
12:30 - 14:00	LUNCH BREAK
14:00 - 15:30	CIT 5: GRAPHICS AND IMAGE PROCESSING CIT 6: SOFTWARE ENGINEERING
15:30 - 16:00	Coffee Break
16:00 - 17:30	CIT 7: CLOUD COMPUTING CIT 8: DATA MANAGEMENT & VISUALIZATION
20:00 - 22:00	CONFERENCE DINNER (Supported by the Cyprus Tourism Organisation)

## FRIDAY SEPTEMBER 2, 2011

08:00 - 18:00	REGISTRATION
09:00 - 10:30	CIT 9: SECURITY & WEB APPLICATIONS CIT 10: IT & E-HEALTH SYSTEMS
10:30 - 11:00	Coffee Break
11:00 - 12:30	CIT 11: COMPUTER NETWORKS CIT 12: SOFTWARE ENG. & SECURITY
12:30 - 14:00	LUNCH BREAK
14:00 - 15:30	CIT 13: AI AND MULTI-AGENT SYSTEMS CIT 14: UBIQUITOUS COMPUTING AND COMPUTER ARCHITECTURE
15:30 - 16:00	COFFEE BREAK
16:00 - 17:30	SCALSOL WORKSHOP
	SLSIS WORKSHOP
17:30 - 18:00	CLOSING REMARKS

WEDNESDAY AUGUST 31, 2011	DRing: A Layered Scheme for Range Queries over DHTs Nicolas Hidalgo, Erika Rosas, Luciana Arantes, Olivier Marin, Pierre Sens and Xavier Bonnaire	
08:00 – 18:00 REGISTRATION	VoroStore - A Secure and Reliable Data Storage for Peer-to-Peer-based MMVEs Sebastian Holzapfel, Sebastian Schuster and Torben Weis	
09:00 – 09:30 ROOM: LEDA OPENING REMARKS	Implementation and Evaluation of a P2P Service Discovery System - Application in Dynamic Large Scale Computing Infrastructure Eddy Caron, Florent Chuffart, Haiwu He and Cedric Tedeschi	
09:30 – 10:30 ROOM: LEDA KEYNOTE ADDRESS Data Dependence Analysis Techniques	Probabilistic Dropping in Push and Pull Dissemination over Distributed Hash Tables Emanuele Carlini, Massimo Coppola and Laura Ricci	
for Multi-core Architectures Prof. Kleanthis Psarris	Experiences with complex user profiles for approximate P2P community matching Patrizio Dazzi, Matteo Mordacchini and Fabio Baglini.	
10:30 – 11:00	12:30 – 14:00	
COFFEE BREAK	LUNCH BREAK	
11:00 – 12:30 ROOM: LEDA		
SCALCOM 1: NETWORKING AND APPLICATIONS	14:00 – 15:30 ROOM: LEDA	
CHAIR: HAI JIANG, ARKANSAS STATE UNIVERSITY	SCALCOM 2: PARALLEL AND CLOUD COMPUTING	
Scalable Wide-Area Multicast with Temporal Rate Filtering Distribution Framework Harald Gjermundrod, Carl Hauser and David Bakken The Potential of Using Network Coding with Geographical Forwarding Routing for Wireless Multimedia Sensor Networks Fahed Awad, Omar Banimelhem, and Nadia Al-Rousan An Energy-Aware Clustering Scheme for Mobile	An Abstraction to support design of Deadlock-free Routing Algorithms for Large and Hierarchical NoCs Rickard Holsmark and Shashi Kumar A Framework for Data Center Scale Dynamic Resource Allocation Algorithms Adam Chester, Matthew Leeke, Mohammed Al Ghamdi, Arshad Jhumka, and Stephen Jarvis	
Applications Carmela Comito, Domenico Talia and Paolo Trunfio <u>SHORT PAPERS</u> Dynamic Active Window Management: A method for improving revenue generation in Dynamic Enterprise Systems Mohammed Al Ghamdi, Adam Chester, Ligang He, and Stephen Jarvis 11:00 – 12:30 ROOM: ATHENA P2P-RDM WORKSHOP CHAIR: RANIERI BARAGLIA, ISTI-CNR, ITALY	<ul> <li>A Grid-based Cloaking Scheme for Continuous Queries in Distributed Systems</li> <li>Hyeongil Kim, Youngsung Shin, and Jaewoo Chang</li> <li><u>SHORT PAPERS</u></li> <li>Proximity-Aware Resource Discovery Architecture in Peer-to-Peer based Volunteer Computing System</li> <li>Toktam Ghafarian-M., Hossein Deldari, and Mohhamad-H. Yaghmaee-M., Ferdowsi</li> <li>Accelerating Circle Detection based on Generalized Projection Method with GPUs Su Chen and Hai Jiang</li> </ul>	
Applications         Carmela Comito, Domenico Talia and Paolo Trunfio         SHORT PAPERS         Dynamic Active Window Management: A method for improving revenue generation in Dynamic Enterprise Systems         Mohammed Al Ghamdi, Adam Chester, Ligang He, and Stephen Jarvis         11:00 – 12:30       ROOM: ATHENA         P2P-RDM WORKSHOP         CHAIR: RANIERI BARAGLIA, ISTI-CNR, ITALY	A Grid-based Cloaking Scheme for Continuous Queries in Distributed Systems Hyeongil Kim, Youngsung Shin, and Jaewoo Chang <u>SHORT PAPERS</u> Proximity-Aware Resource Discovery Architecture in Peer-to-Peer based Volunteer Computing System Toktam Ghafarian-M., Hossein Deldari, and Mohhamad-H. Yaghmaee-M., Ferdowsi Accelerating Circle Detection based on Generalized Projection Method with GPUs Su Chen and Hai Jiang 14:00 – 15:40 ROOM: ATHENA	
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An efficient Role Based Access Control System for on Gait Analysis **Cloud Computing** Susu Jiang, Bofeng Zhang and Daming Wei Tianyi Zhu, Weidong Liu and Jiaxing Song WSRank: A Collaborative Ranking Approach for Web 16:00 - 17:30**ROOM: ATHENA** Service Selection Linlin Meng, Jianxin Li and Hailong Sun **CIT 2: COMPUTER ARCHITECTURE & NETWORKS** CHAIR: MAHMOOD AHMADI, RAZI UNIVERSITY OF KERMANSHAH SCENETester: A Testing Framework to support Fault **Diagnosing for Web Service Composition** Zekun Zhu, Jianxin Li, Yongwang Zhao and Zhuging Li Change Function of 2D/3D Network-on-Chip Alexander Yin, Thomas Canhao Xu, Bo Yang, Pasi Liljeberg and Hannu Tenhunen Middleware Services at Cloud Virtual Layer Imad Abbadi **High Performance Computing** Designing Efficient Parallel Prefix Sum Algorithms for **Cloud Computing: Characteristics and Deployment** GPUs Approaches Gabriele Capannini Zaigham Mahmood Towards a Data Complexity Metric Set for Web Service Wavelet Filter Bank-based nonuniform Multi-Tone **Transceiver for Digital Subscriber Line** Composition Samah Mustafa, Velar Hikmat and Salar Shekha Chengying Mao **Critical Review of Analytical Modelling Approaches for** Time Synchronization of Distributed Readers for a Performability Evaluation of the Handover Phenomena Large-Scale Active RFID Network Hyuntae Cho, Jongdeok Kim and Yunju Baek in Mobile Communication Systems Yonal Kirsal, Enver Ever, Orhan Gemikonakli and Glenford **Design and Implementation of MAC Protocol for** Mapp SmartGrid HAN Environment SOHO Network Performance Optimization via Local Minseok Kim, Sungryul Kim, Jeonghyun Kim and Younghwan Yoo Caching With the Presence of a Main Bottleneck, the Accessing WAN Link Daniel Waters and Jianjun Zhang SHORT PAPERS Policy-Driven Reconfiguration incorporating Multi-15:30 - 16:00 objective Optimization for Performance Management in a Ship Backbone Network COFFEE BREAK Sungwoo Tak and Hyejin Kim 16:00 - 17:30 **ROOM: LEDA** 20:00 - 22:00 **HOTEL TERRACE** CIT 1: GRAPHICS & IMAGE PROCESSING WELCOME RECEPTION CHAIR: CESAR DIAZ, UNIVERSITE DU LUXEMBOURG MRF-based Particle Filters for Multi-touch Tracking and **Gesture Likelihoods** Chi-Min Oh, Md. Zahidul Islam and Chil Woo Lee Geometric Active Model for Lesion Segmentation on Breast Ultrasound Images Myungeun Lee, Yanjuan Chen, Soohyung Kim and Kwanggi Kim A Bit Collision Detection based Hybrid Query Tree Protocol for Anti-Collision in RFID System Haosong Gou and Younghwan Yoo SHORT PAPERS A Secure Recognition Based Graphical Password by Watermarking Arash Habibi Lashkari Vehicle Detection on Aerial Images by Extracting Corner Features for Rotational Invariant Shape Matching Sheng Wang

The Elderly Fall Risk Assessment and Prediction Based

### **THURSDAY SEPTEMBER 1, 2011**

08:00 - 18:00

#### REGISTRATION

09:30 - 10:30

ROOM: LEDA

**KEYNOTE ADDRESS** 

A Smart World: A Development Model for Intelligent Cities Dr. Azamat Abdoullaev

10:30 - 11:00

COFFEE BREAK

11:00 - 12:30

**ROOM: LEDA** 

CIT 3: COMPUTER NETWORKS CHAIR: EDWARD KRESCH, VILLANOVA UNIVERSITY

LHCDS: A Novel Deployment Strategy of Proxy Caches for P2P Traffic in ISP Networks

Haibin Zhai, Hai Jiang, Yi Sun, Jun Li, Jing Liu, Gengfa Fang and Eryk Dutkiewicz

A Full-distributed Architecture for PoC Application in Data Packet Voice Communication Qi Wang, Hai Jiang, Albert K. Wong, Jun Li and Zhongcheng Li

Novel Multicast Operation Method in Metro Ethernet Networks Omayma Abdel Mohsen and Hussein Harb

#### SHORT PAPERS

Modified Deterministic Packet Marking for DDoS Attack Traceback in IPv6 Network You-Ye Sun

Survey, Analysis And Re-Evaluation Of Shuffling Schemes — How Secure And Efficient A Mix Network Can Be Kun Peng

A Poisson Based Bursty Model of Internet Traffic Edward Kresch and Sarvesh Kulkarni (ScalCom paper)

11:00 - 12:30

**ROOM: ATHENA** 

CIT 4: GRAPHICS AND IMAGE PROCESSING CHAIR: SEPTIMIU FABIAN MARE, POLITEHNICA UNIVERSITY OF TIMISOARA

A New Human Interactive Proof System Using Arbitrary and Fractal Polygon Image

Seonyeong Kim, Sora Kim and Hwan-Gue Cho

Decreasing change impact using smart LSB Pixel mapping and data rearrangement Septimiu Mare, Mircea Vladutiu and Lucian Prodan

#### SHORT PAPERS

A Review of Gradient-based and Edge-based Feature Extraction Methods for Object Detection Sheng Wang

12:30 - 14:00

LUNCH BREAK

#### 14:00 - 15:30

**ROOM: LEDA** 

CIT 5: GRAPHICS AND IMAGE PROCESSING CHAIR: AL-AMIN HOSSAIN, CHONBUK NATIONAL UNIVERSITY

Extracting the Path of Frame Center Points Using Spatial Transformation and Motion Estimation Toan Nguyen Dinh and Gueesang Lee

GPU implementation of a region based algorithm for large images segmentation Gilles Perrot, Stéphane Domas, Raphaël Couturier and Nicolas Bertaux

Binarization of Degraded characters using Tensor voting based color clustering Kavitha Madhubalan and Gueesang Lee

Lanes Detection in PCR Gel Electrophoresis Images Sang Cheol Park, In Seop Na, Soo Hyung Kim, Guee Sang Lee, Kang Han Oh, Jeong Hwan Kim and Tae Ho Han

#### SHORT PAPERS

Open Multi Processing (OpenMP) of Gauss-Jordan Method for Solving System of Linear Equations Panagiotis Michailidis

14:00 - 15:30

#### **ROOM: ATHENA**

CIT 6: SOFTWARE ENGINEERING CHAIR: MO AL-GHAMDI, UNIVERSITY OF WARWICK

Starting Model-Based Testing based on Existing Test Cases used for Model Creation Christoph Torens, Lars Ebrecht and Karsten Lemmer.

Model Tree Based Adaption Strategy for Software Effort Estimation by Analogy Mohammad Azzeh

A Bug Rule based Technique with Feedback for Classifying Bug Reports Tao Zhang and Byungjeong Lee

#### SHORT PAPERS

A Software Architecture for Provision of Context-Aware Web-based m-Commerce Applications Poulcheria Benou and Costas Vassilakis

#### Why Groups Are Used In Software System Modernization Decisions? Comparing Group Decisionmaking in Private and Public Sector

Miia-Maarit Saarelainen

15:30 - 16:00

#### **COFFEE BREAK**

16:00 - 17:30

#### ROOM: LEDA

CIT 7: CLOUD COMPUTING CHAIR: MEI WU, DUBLIN CITY UNIVERSITY

#### User-Defined Adaptive Fault-Tolerant Execution of Workflows in the Grid

Felipe Pontes Guimaraes and Alba Cristina Magalhaes Alves De Melo

AOP4CSM: An Aspect-Oriented Programming Approach for Cloud Service Monitoring

Afef Mdhaffar, Riadh Ben Halima, Ernst Juhnke, Mohamed Jmaiel and Bernd Freisleben

## Detecting behavioral variations in system resources of large data centers

Sara Casolari, Michele Colajanni and Stefania Tosi

#### SHORT PAPERS

On Application-level Approaches to Cloudy Computing Service in Agent-base Distributed System Mi-Young Kang, Ji-Seung Nam and Hyung-Ok Lee

A software architecture for the analysis of large sets of data streams in cloud infrastructures Mauro Andreolini, Michele Colajanni and Stefania Tosi

16:00 - 17:30

#### **ROOM: ATHENA**

CIT 8: DATA MANAGEMENT & VISUALIZATION CHAIR: RONALDO MENEZES, FLORIDA TECH

Using Network Science to Understand the Structure of Brazilian Popular Music

Charith Gunaratna and Ronaldo Menezes

#### SHORT PAPERS

An Interactive Web-based Visualization Tool in Action: User Testing and Usability Aspects Bahtijar Vogel, Arianit Kurti, Marcelo Milrad and Andreas Kerren

Navigating Measurements by Cross-classifications in Multi-use Data Warehouse Jie Song and Yubin Bao

Design of a Hierarchical based DHT Overlay P2P Routing Algorithm Patrik Mezö, Mircea Vladutiu and Lucian Prodan

#### 20:00 - 22:00 (MEET AT THE HOTEL LOBBY)

#### **CONFERENCE DINNER**

## FRIDAY SEPTEMBER 2, 2011

08:00 - 18:00

REGISTRATION

09:00 - 10:40

**ROOM: LEDA** 

CIT 9: SECURITY & WEB APPLICATIONS CHAIR: HARALD GJERMUNDROD, UNIVERSITY OF NICOSIA

A New K-NN Query Processing Algorithm Enhancing Privacy Protection in Location-based Services Miyoung Jang and Jaewoo Chang

Independent and Personal SMS Spam Filtering M. Taufiq Nuruzzaman, Changmoo Lee and Deokjai Choi

Greedy and Randomized Feature Selection for Web Search Ranking Feng Pan, Tim Converse, David Ahn, Franco Salvetti, Gianluca Donato

#### SHORT PAPERS

Generation of Semantic Interactive Environment for Personalized Search Jie Yu, Jie Gong and Fangfang Liu

Predicting the Virtual Temperature of Web-Blog Articles as a Measurement Tool for Online Popularity Su-Do Kim, Sung-Hwan Kim and Hwan-Gue Cho

Utilizing SSTAG: A Novel Tag Recommendation Mechanism to Web Page Search Guijia He, Tao Zhang, Byungjeong Lee and Jin Suk Kim

A Fully Automatic Approach for Fixing Firewall Misconfigurations

Nihel Ben Youssef Ben Souayeh and Adel Bouhoula

09:00 - 10:30

#### **ROOM: ATHENA**

CIT 10: IT & E-HEALTH SYSTEMS CHAIR: LEONIDAS FRAGIDIS, DEMOCRITUS UNIVERSITY OF THRACE

Flexible Homecare Application Personalization and Integration Using Pattern-based Service Tailoring, Supporting Independent Living of Elderly with IT Mohammad Zarifi Eslami, Alireza Zarghami, Brahmananda Sapkota and Marten J. Van Sinderen.

#### SHORT PAPERS

The use of Electronic Health Record in Greece: Current Status

Leonidas Fragidis and Prodromos Chatzoglou

Contouret-based Feature Extraction For Computer Aided Diagnosis Of Medical Patterns Sherin Youssef, Rana Salem and Ezzat Korany

Spatial Cloaking Method Based on Reciprocity Property for Users' Privacy in Road Networks Amina Hossain, Al-Amin Hossain and Jae-Woo Chang

#### 10:30-11:00

#### **COFFEE BREAK**

11:00 - 12:30

**ROOM: LEDA** 

CIT 11: COMPUTER NETWORKS CHAIR: SATORU OHTA, TOYAMA PREFECTURAL UNIVERSITY

Opportunistic Scheduling and Performance Analysis on Wireless Network Coding Rui Zhang and Quan Qian

Extending the Lifetime of Heterogeneous Sensor Networks using a Two-level Topology Mei Wu and Martin Collier

Fast augmentation algorithms for maximising the flow in repairable networks after a component failure Michael Todinov

#### SHORT PAPERS

Design and Implementation of a Smartphone-based Reliable Real-Time Wi-Fi Broadcast System Se-Mi Kim, Seung-Chur Yang and Jong-Deok Kim

Application of Live Video Streaming over GRID and Cloud infrastructures Dimitris Karakasilis, Fotis Georgatos, Lambros Lambrinos and Theodoros Alexopoulos

#### 11:00-12:40

#### **ROOM: ATHENA**

CIT 12: SOFTWARE ENG. & SECURITY CHAIR: TAO ZHANG, THE UNIVERSITY OF SEOUL

A Novel Adjustable Matrix Bloom Filter based Copy-Detection System for Digital Libraries Shahabeddin Geravand and Mahmood Ahmadi

A Global Dictionary Based Approach to Fast Similar Text Search Sun-Young Park, Seonyeong Kim, Sung-Hwan Kim and Hwan-Gue Cho

ArchMDE Approach for the Formal Verification of Real Time Systems

Nourchene Elleuch, Adel Khalfallah and Samir Ben Ahmed

#### SHORT PAPERS

A clustering data fusion method for intrusion detection system

Boutheina Fessi, Salah Benabdallah, Yacine Djemaiel and Noureddine Boudriga

Effects of Radio Triggered Sensor MAC Protocol over Wireless Sensor Network Pranesh Sthapit and Jae-Young Pyun

Effective SQL Injection Attack Reconstruction Using Network Allen Pomeroy and Qing Tan

12:30 - 14:00

LUNCH BREAK

#### 14:00 - 15:30

ROOM: LEDA

CIT 13: AI AND MULTI-AGENT SYSTEMS CHAIR: MOHAMMAD ZARIFI ESLAMI, UNIVERSITY OF TWENTE

Extending Linear Discriminant Analysis by using Unlabeled Data

Young Tae Lee, Yong Joon Shin and Cheong Hee Park

Efficient Team Formation based on Learning and Reorganization and Influence of Communication Delay Ryota Katayanagi and Toshiharu Sugawara

Machine Learning Approach to the Power Management of Server Clusters Satoru Ohta and Takehito Hirota

#### SHORT PAPERS

New approach to system level self-diagnosis Viktor Mashkov

14:00 - 15:30

#### **ROOM: ATHENA**

CIT 14: UBIQUITOUS COMPUTING AND COMPUTER ARCHITECTURE

CHAIR: CHRISTOS METTOURIS, UNIVERSITY OF CYPRUS

Design and Evaluation of Hybrid Congestion Control Mechanism for Video Streaming Hisamatsu Hiroyuki

Exploring the Effect of Buffer Behaviour on Perceived Video Quality Bailey Colin and Peng Xiaohong

#### SHORT PAPERS

A Novel mobility model for realistic behavior in Vehicular Ad hoc Network Dhananjay Gaikwad and Mukesh Zaveri

A Laxity-Aware Memory Access Scheduler for High Performance Multimedia SoC Guangfei Zhang, Yifei Jiang, Wenxiang Wang and Menghao Su

Software and Hardware Co-designed Multi-Level TLB for Chip Multiprocessors Xiaohui Zhang, Ming Cong and Guanggiang Chen

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#### 15:30 - 16:00

#### **COFFEE BREAK**

16:00 - 17:40

**ROOM: LEDA** 

SCALSOL WORKSHOP CHAIR: JOHNATAN E. PECERO, UNIVERSITY OF LUXEMBOURG

A review on Task Performance Prediction in Multi-core Based Systems Frederic Pinel, Johnatan E. Pecero, Pascal Bouvry and Samee U. Khan

An Instruction-Level Energy Estimation and Optimization Methodology for GPU

Yue Wang and Nagarajan Ranganathan

Green Flexible Opportunistic Computing with Virtualization

Harold Castro, German Sotelo, Cesar O. Diaz and Pascal Bouvry

Energy Efficiency on Scalable Computing Architectures Carlos J. Barrios Hernandez, Daniel A. Sierra, Sebastien Varrette and Dino Lopez

Scalable and Energy-efficient Scheduling Techniques for Large-scale Systems Cesar O. Diaz, Mateusz Guzek, Johnatan E. Pecero, Pascal Bouvry and Samee U. Khan

#### ROOM: ATHENA

SLSIS WORKSHOP Chair: Shun-Yun Hu, Academia Sinica, Taiwan

A Privacy Preserving System for Cloud Computing Dennis Löhr, Benjamin Justus and Ulrich Greveler

Survivable Interaction Distribution Networks Shun-Yun Hu

17:30 - 18:00

16:00 - 17:30

**ROOM: LEDA** 

**CLOSING REMARKS** 

#### END OF THE IEEE CIT 2011 AND SCALCOM 2011

EVENTS!

THANK YOU FOR YOUR PARTICIPATION

AND

HOPE TO SEE YOU NEXT YEAR!!!