



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



Networking 2011

9-13 May 2011
Valencia, Spain

NETWORKING 2011

9-13 May 2011. Valencia, SPAIN

MESSAGE FROM THE GENERAL CHAIRS

On behalf of the Organizing Committee, it is our pleasure to welcome you to our University and city.

Networking 2011 is the 10th event of the series of International Conferences on Networking. This conference has established itself as a prestigious international forum for researchers and practitioners to discuss recent advances in the field of computer communications.

The Conference takes place at the Universitat Politècnica de València, one of the biggest technical universities in Spain, and spans a full week. The technical program of Networking 2011 is organized in three days from Tuesday 10 to Thursday 12. A total of 64 high quality papers (22% of the submitted papers) are presented by their authors in two parallel tracks. Four associated workshops focusing on recent hot topics on telecommunications are organized on Friday 11. The conference also includes three technical talks from very prestigious scientists: Prof. Jim Kurose, Prof. José Duato and Dr. Antony Rowstron. This technical program is completed with social events that help to strengthen relationships between participants.

The Universitat Politècnica de València (UPV) is a public education institution that offers modern and flexible degrees designed to meet the demands of the society, as well as official post-graduate programmes that are subject to demanding educational control systems. It has three campus, Vera (inside Valencia city), Alcoi and Gandia, with a total of 36,187 students, 2,843 members of teaching and research staff, and 2,396 administrative and technical staff.

València, situated on the Mediterranean coast of eastern Spain and with a population of 800,000 inhabitants, is the capital city of the autonomous region Comunitat Valenciana. Not many cities are capable of so harmoniously combining a fine array of sights from the distant past with the more innovative current constructions. Life in the city spreads down to the seafront with the commercial harbour, marinas and the beaches of Las Arenas and Malvarrosa.

In this combination of technical and tourist environments we wish you a productive and enjoyable week.

Pietro Manzoni and Ana Pont
Networking 2011 General Chairs

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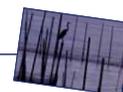
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- Ralf Steinmetz, Technische Universitaet Darmstadt, Germany
- James Sterbenz, University of Kansas & Lancaster University (UK), USA
- Burkhard Stiller, University of Zuerich, Switzerland
- Vijay Subramanian, National University of Ireland, Maynooth, Ireland
- Violet Syrotiuk, Arizona State University, USA
- Tarik Taleb, NEC Europe Ltd., Germany
- Phuoc Tran-Gia, University of Wuerzburg, Germany
- Vassilis Tsaoussidis, Democritus University of Thrace, Greece
- Piet Van Mieghem, Delft University of Technology, The Netherlands
- Huijuan Wang, Delft University of Technology, Netherlands, The Netherlands
- Lars Wolf, Technische Universität Braunschweig, Germany
- Tilman Wolf, University of Massachusetts, USA
- Guoliang Xue, Arizona State University, USA
- Martina Zitterbart, KIT (Karlsruhe Institute of Technology), Germany



PROGRAM AT A GLANCE

	Monday, May 9	Tuesday, May 10	Wednesday, May 11	Thursday, May 12	Friday, May 13			
9:00		Opening Session				9:00		
9:30	Tutorials	Prof. Jose Duato Keynote speech	Prof. Jim Kurose Keynote speech	Dr. Ant Rowstron Keynote speech	Workshops	9:30		
10:30		OMM (1 minute madness)	OMM (1 minute madness)	OMM (1 minute madness)		10:30		
11:15		coffee break	coffee break	coffee break		11:15		
12:00		Session 1A: Network Topology Configuration	Session 1B: Content Management	Session 4A: Next Generation Internet		Session 4B: Resource Allocation	Session 7A: Anomaly Detection	Session 7B: Energy Efficiency
13:30		Lunch	Lunch	Lunch	Lunch	13:30		
14:30	Tutorials	Session 2A: Pricing	Session 2B: Path Diversity	Session 5A: Peer-to-peer	Session 5B: Resource Allocation Radio	Session 8A: Network Science	Session 8B: DTN and Sensor networks	15:00
16:30		coffee break	coffee break	Closing Session		Workshops	16:30	
17:00		Session 3A: Mobility Modelling	Session 3B: TCP	Session 6A: Social Networks	Session 6B: Resource Allocation Wireless		Typical valencian afternoon snack	17:00
18:30			Welcome Cocktail & Muixaranga				18:30	
19:00			Banquet			19:00		
20:00						20:00		

KEYNOTE SPEAKERS

José Duato, Universitat Politècnica de València, SPAIN

Tuesday, 10 May, 09:30-10:15, General Room

Title:

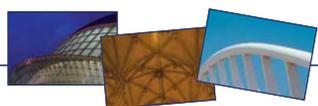
Toward more energy efficient and cost effective Internet services.

Summary:

The ever increasing demand of Internet services is leading to the deployment of increasingly larger servers. These servers not only imply large infrastructure costs but also the consumption of an increasing percentage of the electricity produced in power plants, that is already approaching a 2%. To address these concerns, computer and networking equipment manufacturers are developing new components that deliver more performance with a reduced power budget. Processors were the first components to incorporate power management techniques but other components will follow. Moreover, a whole set of techniques to increase energy efficiency and cost effectiveness are being deployed or are currently under development. Those techniques include interconnect consolidation, virtualization, scalable shared-memory architectures, the use of low-cost accelerators, and the design of interconnects tailored to the real needs, among others. This keynote addresses these concerns, presents quantitative data, and describes some of the solutions that are being developed.

About the speaker:

Jose Duato received the MS and PhD degrees in electrical engineering from the Universidad Politècnica de Valencia, Spain, in 1981 and 1985, respectively. Currently, Dr. Duato is Professor in the Department of Computer Engineering (DISCA) at the same university. He was also an adjunct professor in the Department of Computer and Information Science, The Ohio State University. His current research interests include interconnection networks and multiprocessor architectures. Prof. Duato has published over 400 refereed papers. He proposed a powerful theory of deadlock-free adaptive routing for wormhole networks. Versions of this theory have been used in the design of the routing algorithms for the MIT Reliable Router, the Cray T3E supercomputer, the on-chip router of the Alpha 21364 microprocessor, and the IBM BlueGene/L supercomputer. Prof. Duato also developed RECN, the only truly scalable congestion management technique proposed to date, and a very efficient routing algorithm for fat trees that has been incorporated into Sun Microsystem's 3456-port InfiniBand Magnum switch. Currently, Prof. Duato leads the Advanced Technology Group in the HyperTransport Consortium, whose main result to date has been the development and standardization of an extension to HyperTransport (High Node Count HyperTransport Specification 1.0) that extends the device addressing capabilities of HyperTransport in several orders of magnitude. Prof. Duato is the first author of the book "Interconnection Networks: An Engineering Approach". Dr. Duato served as a member of the editorial boards of IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Computers, and IEEE Computer Architecture Letters. He has been the General Co-Chair for the 2001 International Conference on Parallel Processing, the Program Committee Chair for the Tenth International Symposium on High Performance Computer Architecture (HPCA-10), and the Program Co-Chair for the 2005 International Conference on Parallel Processing. Also, he served as Co-Chair, member of the Steering Committee, Vice-Chair, or member of the Program Committee in more than 60 conferences, including the most prestigious conferences in his area (HPCA, ISCA, IPPS/SPDP, IPDPS, ICPP, ICDCS, Europar, HiPC).



Jim Kurose, University of Massachusetts, USA

Wednesday, 11 May, 09:30-10:15, General Room

Title:

Cyber-physical systems: linking sensing, networking, computation, and people

Summary:

Cyber-physical systems integrate sensing, networking, and computation to observe, understand, predict and respond to phenomena in both technological and naturally-occurring systems. We begin this talk with a broad discussion of such cyber-physical systems. As a case study, we then “dive deep” into the CASA (Collaborative Adaptive Sensing of the Atmosphere) project - an NSF Engineering Research Center investigating the design and implementation of a dense network of low-power meteorological radars whose goal is to collaboratively and adaptively sense, understand, predict and respond to hazardous weather occurring in the lowest few kilometers of the earth’s atmosphere. We overview the CASA project, describe its computing and networking challenges, and overview the software/network architecture and implementation of the CASA testbeds. We then focus on networking- and computing-related research issues and discuss our experiences in using user-specified preferences to drive the optimization of the network’s sensing behavior. Throughout the talk, we’ll discuss a number of interesting on-going and open research issues, both in CASA, and in the larger context of cyber-physical systems, including smart grids.

About the speaker:

Jim Kurose received a B.A. degree in physics from Wesleyan University and his Ph.D. degree in computer science from Columbia University. He is currently Executive Associate Dean of the College of Natural Sciences and Distinguished Professor (and past chairman) in the Department of Computer Science at the University of Massachusetts. Professor Kurose has been a Visiting Scientist at IBM Research, INRIA, Institut EURECOM, the University of Paris, LIP6, and Thomson Research Labs.

His research interests include network protocols and architecture, network measurement, sensor networks, multimedia communication, and modeling and performance evaluation. Dr. Kurose has served as Editor-in-Chief of the IEEE Transactions on Communications and was the founding Editor-in-Chief of the IEEE/ACM Transactions on Networking. He has been active in the program committees for IEEE Infocom, ACM SIGCOMM, and ACM SIGMETRICS conferences for a number of years, and has served as Technical Program Co-Chair for these conferences. He has won several conference best paper awards and received the ACM Sigcomm Test of Time Award. He has also received a number of teaching awards including the IEEE Taylor Booth Education Medal. He is a Fellow of the IEEE and the ACM. With Keith Ross, he is the co-author of the textbook, Computer Networking, a top down approach (5th edition) published by Addison-Wesley Longman.

Antony Rowstron, Microsoft Research Cambridge, UK

Thursday, 12 May, 09:30-10:15, General Room

Title:

Rethinking the data center cluster: The CamCube approach

Summary:

Why do we build data center clusters in the way that we do? I will describe some of the work we are currently doing in the CamCube project which aims to build, from the ground up, a new data center cluster architecture designed to make it easier to create the large-scale services run on these clusters.

CamCube liberally borrows ideas from high performance computing, distributed systems and networking and represents a very different design point that blatantly violates many accepted norms of data center cluster architecture. The talk will motivate the design choices, including the use of a direct connect network (as used in HPC) and a new network stack that incorporates key-based routing functionality.

In order to demonstrate the potential of CamCube, we will describe a number of services that have been written for CamCube, including a MapReduce-like service, that provide significantly better performance when run on CamCube compared to a traditional cluster.

About the speaker:

For the last 11 or so years Ant Rowstron has been working as a researcher at Microsoft Research in Cambridge, UK where he is now a Principal Researcher and co-leads the Systems and Networking Group.

His research interests are broad, covering the spectrum of systems, distributed systems and networking, but he is best known for his work on structured overlays and distributed hash tables. He received an MEng degree in Computer Systems and Software Engineering in 1993 from the University of York, UK, and a DPhil degree in Computer Science in 1996 from the University of York, UK. In 1996 he moved to the Computer Laboratory at Cambridge University, UK as a Research Associate and then moved to the Laboratory for Communications Engineering in the Engineering Department, Cambridge University, UK as a Senior Research Associate. Since 1999 he has worked at Microsoft Research in Cambridge, UK.



TECHNICAL SESSIONS

Tuesday 10 May 2011

One Minute Madness Session 1Room: General Room
10:30h**Session 1A: Network Topology Configuration**Room: 0.1
12:00h**Optimal Node Placement in Distributed Wireless Security Architectures**

Fabio Martignon (University of Bergamo, Italy); Stefano Paris (Politecnico di Milano, Italy); Antonio Capone (Politecnico di Milano, Italy)

Geographical Location and Load based Gateway Selection for Optimal Traffic Offload in Mobile Networks

Tarik Taleb (NEC Europe Ltd., Germany); Yassine Hadjadj-Aoul (University of Rennes 1, France); Stefan Schmid (NEC Europe Ltd., Germany)

Femtocell Coverage Optimisation Using Statistical Verification

Tiejun Ma (Imperial College, United Kingdom); Peter Pietzuch (Imperial College London, United Kingdom)

Points of Interest Coverage with Connectivity Constraints using Wireless Mobile Sensors

Milan Erdelj (INRIA Lille - Nord Europe, France); Tahiry Razafindralambo (INRIA Lille - Nord Europe, France); David Simplot-Ryl (Université Lille1 - Sciences et Technologies, France)

Session 1B: Content ManagementRoom: 0.2
12:00 h**Efficient Processing of Multi-Connection Compressed Web Traffic**

Yehuda Afek (Tel-Aviv University, Israel); Anat Bremler-Barr (Interdisciplinary Center Herzliya, Israel); Yaron Koral (Tel Aviv University, Israel)

The Resource Efficient Forwarding in the Content Centric Network

Yifan Yu (France Telecom R&D Beijing, P.R. China)

Modelling and Evaluation of CCN-Caching Trees

Ioannis Psaras (University College London, United Kingdom); Richard G Clegg (University College London, United Kingdom); Raul L Landa (University College London, United Kingdom); Wei Koong Chai (University College London, United Kingdom); George Pavlou (University College London, United Kingdom)

Empirical Evaluation of HTTP Adaptive Streaming under Vehicular Mobility

Jun Yao (University of New South Wales, Australia); Salil Kanhere (University of New South Wales, Australia); Imran Hossain (University of New South Wales, Australia); Mahbub Hassan (University of New South Wales, Australia)

Session 2A: PricingRoom: 0.1
15:00 h**BGP and inter-AS economic relationships**

Enrico Gregori (CNR-IIT, Italy); Alessandro Improta (University of Pisa, Italy); Luciano Lenzi (University of Pisa, Italy); Lorenzo Rossi (CNR-IIT, Italy); Luca Sani (University of Pisa, Italy)

Network Non-neutrality Debate: An Economic Analysis

Eitan Altman (INRIA, France); Arnaud Legout (INRIA Sophia Antipolis, France); Yuedong Xu (INRIA, France)

Strategyproof Mechanisms for Content Delivery via Layered Multicast

Ajay Gopinathan (University of Calgary, Canada); Zongpeng Li (University of Calgary, Canada)

A Flexible Auction Model for Virtual Private Networks

Kamil Kotys (Warsaw University of Technology, Poland); Krzysztof Pienkosz (Warsaw University of Technology, Poland); Eugeniusz Toczyowski (Warsaw University of Technology, Poland)

Session 2B: Path DiversityRoom: 0.2
15:00 h**oBGP: an Overlay for a Scalable iBGP Control Plane**

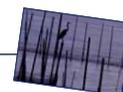
Iuniana Oprescu (Orange Labs, France); Mickael Meulle (Orange Labs R&D, France); Steve Uhlig (TU Berlin/T-labs, Germany); Cristel Pelsser (IJJ, Japan); Olaf Maennel (Loughborough University, United Kingdom); Philippe Owezarski (LAAS, France)

Scalability of iBGP Path Diversity Concepts

Uli Alexander Bornhauser (University of Bonn, Germany); Peter Martini (University of Bonn, Germany); Martin Horneffer (Deutsche Telekom AG, Germany)

MultiPath TCP: From theory to practice

Sébastien Barré (Université Catholique de Louvain, Belgium); Christoph Paasch (Université Catholique de Louvain, Belgium); Olivier Bonaventure (Université catholique de Louvain, Belgium)



Stealthier Inter-packet Timing Covert Channels

Sebastian Zander (Swinburne University of Technology, Australia); Grenville Armitage (Swinburne university of Technology, Australia); Philip Branch (Swinburne University of Technology, Australia)

Session 3A: Mobility Modelling

Room: 0.1
17:00 h

A Collaborative AAA Architecture to Enable Secure Real-World Network Mobility

Panagiotis Georgopoulos (Lancaster University, United Kingdom); Ben McCarthy (Lancaster University, United Kingdom); Christopher Edwards (Lancaster University, United Kingdom)

Markov Modulated Bi-variate Gaussian Processes for Mobility Modeling and Location Prediction

Paulo Salvador (University of Aveiro, Portugal); António Nogueira (University of Aveiro/Instituto de Telecomunicações, Portugal)

Mobility Prediction Based Neighborhood Discovery in Mobile Ad Hoc Networks

Xu Li (University of Waterloo, Canada); Nathalie Mitton (INRIA Lille-Nord Europe, CNRS UMR 8022, IRCICA, USTL, France); David Simplot-Ryl (Université Lille1 - Sciences et Technologies, France)

STEPS - an approach for human mobility modelling

Anh Dung Nguyen (University of Toulouse, France); Patrick Senac (ISAE, France); Victor Ramiro (Universidad de Chile, Chile); Michel Diaz (Laas CNRS, France)

Session 3B: TCP

Room: 0.2
17:00-18:30h

Revisiting TCP Congestion Control using Delay Gradients

David Hayes (Swinburne University of Technology, Australia); Grenville Armitage (Swinburne university of Technology, Australia)

NF-TCP: A Network Friendly TCP Variant for Background Delay-Insensitive Applications

Mayutan Arumathurai (University of Goettingen, Germany); Xiaoming Fu (University of Goettingen, Germany); K. K. Ramakrishnan (AT&T Labs - Research, USA)

Impact of queueing delay estimation error on equilibrium and its stability

Emre A. Yavuz (Royal Institute of Technology (KTH), Sweden); Corentin Briat (KTH, Sweden); Gunnar Karlsson (KTH, Royal Institute of Technology, Sweden)

On the Uplink Performance of TCP in Multi-rate 802.11 WLANs

Naeem Khademi (University of Oslo, Norway); Michael Welzl (University of Oslo, Norway); Renato Lo Cigno (University of Trento, Italy)

Wednesday 11 May 2011

One Minute Madness Session 2

Room: General Room
10:30h

Session 4A: Next Generation Internet

Room: 0.1
12:00 h

A Deep Dive into the LISP Cache and what ISPs should know about it

Juhoon Kim (TU Berlin, Germany); Luigi Iannone (Deutsche Telekom Laboratories, TU Berlin, Germany); Anja Feldmann (TU-Berlin, Germany)

Data Plane Optimization in Open Virtual Routers

Muhammad Siraj Rathore (KTH University Stockholm, Sweden); Markus Hidell (KTH Royal Institute of Technology, Sweden); Peter Sjödin (KTH, Sweden)

Performance Comparison of Hardware Virtualization Platforms

Daniel Schlosser (University of Wuerzburg, Germany); Michael Duelli (University of Wuerzburg, Germany); Sebastian Goll (University of Wuerzburg, Germany)

A Novel Scalable IPv6 Lookup Scheme Using Compressed Pipelined Tries

Michel Hanna (University of Pittsburgh, USA); Sangyeun Cho (University of Pittsburgh, USA); Rami Melhem (University of Pittsburgh, USA)

Session 4B: Resource Allocation

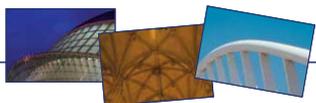
Room: 0.2
12:00 h

Collaboration between ISPs for Efficient Overlay Traffic Management

Eleni Agiatzidou (Athens University of Economics and Business, Greece)

Optimal Joint Call Admission Control with Vertical Handoff on Heterogeneous Networks

Diego Pacheco-Paramo (Universidad Politécnic de Valencia, Spain); Vicent Pla (Universitat Politècnica de Valencia, Spain); Vicente Casares-Giner (Universitat Politècnica de Valencia, Spain); Jorge Martínez-Bauset (Universidad Politécnic de Valencia, Spain)



Balancing by PREFLEX: Congestion Aware Traffic Engineering

João Taveira Araújo (University College London, United Kingdom); Richard G Clegg (University College London, United Kingdom); Imad Grandi (University College London, United Kingdom); Miguel Rio (UCL, United Kingdom); George Pavlou (University College London, United Kingdom)

EFD: An efficient low-overhead scheduler

Jinbang Chen (Eurecom, France); Martin Heusse (Grenoble Informatics Laboratory, France); Guillaume Urvoy-Keller (University of Nice Sophia-Antipolis, France)

Session 5A: Peer to peer

Room: 0.1

15:00 h

UDP NAT and Firewall Puncturing in the Wild

Gertjan Halkes (Delft University of Technology, The Netherlands); Johan A. Pouwelse (Delft University of Technology, The Netherlands)

Enhancing Peer-to-Peer Traffic Locality Based on Selective Tracker Blocking

Haiyang Wang (Simon Fraser University, Canada); Feng Wang (Simon Fraser University, Canada); Jiangchuan Liu (Simon Fraser University, Canada)

Defending Against Sybil Nodes in BitTorrent

Jung Ki So (North Carolina State University, USA); Douglas Reeves (North Carolina State University, USA)

Traffic Localization for DHT-based BitTorrent networks

Matteo Varvello (Bell Labs, Alcatel-Lucent, USA); Moritz Steiner (Bell-Labs / Alcatel-Lucent, USA)

Session 5B: Resource Allocation Radio

Room: 0.2

15:00 h

Flexible dynamic spectrum allocation in cognitive radio networks based on game-theoretical mechanism design

Jose R Vidal (Universidad Politecnica de Valencia, Spain); Vicent Pla (Universitat Politecnica de Valencia, Spain); Luis Guijarro (Universidad Politecnica de Valencia, Spain); Jorge Martinez-Bauset (Universidad Politécnica de Valencia, Spain)

Channel Assignment and Access Protocols for Spectrum-agile Networks with Single-Transceiver Radio

Haythem A. Bany Salameh (Yarmouk University, Jordan); Marwan Krunz (University of Arizona, USA)

The Problem of Sensing Unused Cellular Spectrum

Daniel Willkomm (Technische Universitaet Berlin, Germany); Sridhar Machiraju (Google, USA); Jean Bolot (Technicolor, USA); Adam M Wolisz (Technical University of Berlin, Germany)

Adaptive Transmission of Variable-Bit-Rate Video Streams to Mobile Devices

Farid Molazem Tabrizi (Simon Fraser University, Canada); Joseph G Peters (Simon Fraser University, Canada); Mohamed Hefeeda (Simon Fraser University, Canada)

Session 6A: Social Networks

Room: 0.1

17:00 h

SMS: Collaborative Streaming in Mobile Social Networks

Chenguang Kong (The University of Hong Kong, Hong Kong); Chuan Wu (The University of Hong Kong, Hong Kong); Victor O. K. Li (University of Hong Kong, P.R. China)

Assessing the Effects of a Soft Cut-off in the Twitter Social Network

Saptarshi Ghosh (Indian Institute of Technology, Kharagpur, India); Ajitesh Srivastava (Birla Institute of Technology and Science, Pilani, India); Niloy Ganguly (Indian Institute of Technology Kharagpur, India)

Characterising aggregate inter-contact times in heterogeneous opportunistic networks

Andrea Passarella (IIT-CNR, Italy); Marco Conti (IIT-CNR, Italy)

Are Social Relations Overrated? A Study for the Social Aggregator Digg.com

Christian Doerr (Delft University of Technology, The Netherlands); Siyu Tang (Delft University of Technology, The Netherlands); Norbert Blenn (Delft University of Technology, The Netherlands); Piet Van Mieghem (Delft University of Technology, The Netherlands)

Session 6B: Resource Allocation Wireless

Room: 0.2

17:00 h

Multiscale Fairness and its Application to Resource Allocation in Wireless Networks

Eitan Altman (INRIA, France); Konstantin Avrachenkov (INRIA Sophia Antipolis, France); Sreenath Ramanath (INRIA, France)

Fast-Converging Scheduling and Routing algorithms for WiMAX Mesh Networks

Salim Nahle (University of Paris 6, France); Naceur Malouch (Université Pierre et Marie Curie - Paris 6, France)



OFDMA Downlink Burst Allocation Mechanism for IEEE 802.16e Networks

Juan Ignacio del-Castillo (University of Castilla-La Mancha, Spain); Francisco Manuel Delicado (University of Castilla la Mancha, Spain); José Villalón (UCLM, Spain)

Adaptive On-The-Go Scheduling for End-to-end Delay Control in TDMA-based Wireless Mesh Networks

Yung-Cheng Tu (Academia Sinica, Taiwan); Meng Chang Chen (Academia Sinica, Taiwan); Yeali S. Sun (National Taiwan University, Taiwan)

Thursday 12 May

One Minute Madness Session 3

Room: General Room
10:30h

Session 7A: Anomaly Detection

Room: 0.1
12:00 h

BotTrack: Tracking Botnets using NetFlow and PageRank

Jérôme François (University of Luxembourg, Luxembourg); Shaonan Wang (University of Luxembourg, Luxembourg); Radu State (University of Luxembourg, Luxembourg); Thomas Engel (University of Luxembourg, Luxembourg)

Learning Entropy

Lele Zhang (University of Melbourne, Australia); Darryl Veitch (University of Melbourne, Australia)

Machine Learning Approach for IP-Flow Record Anomaly Detection

Cynthia Wagner (University of Luxembourg, Luxembourg); Jérôme François (University of Luxembourg, Luxembourg); Radu State (University of Luxembourg, Luxembourg); Thomas Engel (University of Luxembourg, Luxembourg)

UNADA: Unsupervised Network Anomaly Detection using Sub-Space Outliers Ranking

Pedro Casas (LAAS-CNRS, France); Johan Mazel (LAAS-CNRS, France); Philippe Owezarski (LAAS, France)

Session 7B: Energy Efficiency

Room: 0.2
12:00 h

Using Coordinated Transmission with Energy Efficient Ethernet

Pedro Reviriego (Universidad Antonio de Nebrija, Spain); Ken Christensen (University of South Florida, USA); Alfonso Sánchez-Macián, Juan A. Maestro (Universidad Antonio de Nebrija, Spain)

Online Job-Migration for Reducing the Electricity Bill in the Cloud

Niv Buchbinder (Technion University, Israel); Navendu Jain (Microsoft Research, USA); Ishai Menache (Massachusetts Institute of Technology, USA)

Stochastic Traffic Engineering for live audio/video delivering over Energy-limited wireless access networks

Nicola Cordeschi ("Sapienza" University of Rome, Italy); Tatiana Patriarca (University of Rome, Sapienza, Italy); Enzo Baccarelli (University of Rome "La Sapienza", Italy)

VMFlow: Leveraging VM Mobility to Reduce Network Power Costs in Data Centers

Vijay Mann (IBM Research, New Delhi, India); Avinash Kumar (Indian Institute of Technology, Delhi, India); Partha Dutta (IBM India Research Lab, India); Shivkumar Kalyanaraman (IBM Research - India, Bangalore, India)

Session 8A: Network Science

Room: 0.1
15:00 h

Epidemic Spread in Mobile Ad Hoc Networks: Determining the Tipping Point

Nicholas Valler (University of California, Riverside, USA); B. Aditya Prakash (Carnegie Mellon University, USA); Hanghang Tong (Carnegie Mellon University, USA); Michalis V. Faloutsos (University of California Riverside, USA); Christos Faloutsos (Carnegie Mellon University, USA)

Small Worlds and Rapid Mixing with a Little More Randomness on Random Geometric Graphs

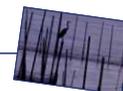
Gunes Ercal (University of Kansas, USA)

A Random Walk Approach to Modeling the Dynamics of the Blogosphere

M. Zubair Shafiq (Michigan State University, USA); Alex X. Liu (Michigan State University, USA)

A Nash bargaining solution for Cooperative Network Formation Games

Konstantin Avrachenkov (INRIA Sophia Antipolis, France); Jocelyne Elias (Paris Descartes University, France); Fabio Martignon (University of Bergamo, Italy); Giovanni Neglia (INRIA Sophia Antipolis, France); Leon Petrosyan (St. Petersburg State University, Russia)



Session 8B: DTN and Sensor Networks

Room: 0.2

15:00 h

MAC Layer Support for Delay Tolerant Video Transport in Disruptive MANETs

Morten Lindeberg (University of Oslo, Norway); Stein Kristiansen (University of Oslo, Norway); Vera H. Goebel (University of Oslo, Norway); Thomas Plagemann (University of Oslo, Norway)

DTN support for news dissemination in an urban area

Tuan-Minh Pham (UPMC Sorbonne Universités, France); Serge Fdida (UPMC Sorbonne Universités, France)

Stochastic Scheduling for Underwater Sensor Networks

Dimitri Marinakis (University of Victoria, Canada); Kui Wu (University of Victoria, Canada); Sue Whitesides (University of Victoria, Canada)

Using SensLAB as a First Class Scientific Tool for Large Scale Wireless Sensor Network Experiments

Clément Burin des rozières (Inria, France); Guillaume Chelius (INRIA, France); Tony Ducrocq (Inria, France); Eric Fleury (ENS Lyon / INRIA, France); Antoine Fraboulet (INSA de Lyon / INRIA, France); Antoine Gallais (University of Strasbourg, France); Nathalie Mitton (INRIA Lille-Nord Europe, CNRS UMR 8022, IRCICA, USTL, France); Thomas Noel (University of Strasbourg, France); Julien Vandaele (Inria, France)

GENERAL INFORMATION

Networking Registration

The registration desk is located at the Computer Engineering School Hall, building 1E, Universitat Politècnica de València

Tuesday, 10 May: 08:30-13:30, 15:00-18:00

Wednesday, 11 May: 09:30-11:30; 15:00-16:30

Thursday, 12 May: 09:30-11:30

Friday, 13 May: 09:30-13:30, 16:30-18:00

Lunch

Lunch is served for Networking participants at 13:30h in La Vella Restaurant, building 1B, UPV. Extra lunch tickets can be purchased at the registration desk with a cost of 20 € each.

Welcome Cocktail

A welcome cocktail is offered to the participants on Monday 10 May at the Computer Engineering School Hall. The cocktail is followed of a Muixaranga (typical valencian human towers).

Banquet

The conference banquet is held at the 39°27' N Restaurant located at the Marina Real Juan Carlos I on Wednesday, 11 May at 20:30h.

Extra tickets for the banquet can be purchased at the registration desk with a cost of 60€ each.



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