IEEE Symposium on Computers and Communications 2008 (ISCC 2008)

July 6 - 9, 2008, Marrakech, Morocco

Program

The Welcome Address, Keynote Speeches and the Closing Plenary & Awards Session will be held in Room Agadir. For the presentation sessions, see the next chart.

Time	Monday, July 7	Tuesday, July 8	Wednesday, July 9		
08:30 AM- 09:00 AM	Welcome Address				
09:00 AM- 09:45 AM	Keynote Speaker Dr. Khorram	Keynote Speaker Dr. Boutaba	Keynote Speaker Dr. Daneshmand		
09:45 AM- 10:15 AM	Break				
10:15 AM- 12:00 PM	4 Parallel Sessions	4 Parallel Sessions	4 Parallel Sessions		
12:00 PM- 02:15 PM	Lunch				
02:15 PM- 04:00 PM	4 Parallel Sessions	4 Parallel Sessions	4 Parallel Sessions		
04:00 PM- 04:30 PM	Break				
04:30 PM- 06:00 PM	4 Parallel Sessions	4 Parallel Sessions	2 Parallel Sessions		
06:00 PM- 06:30 PM			Closing Plenary and Awards Session		
07:00 PM- 10:00 PM		Conference Banquet			

Titles of the Keynote Speeches:

- **Dr. Khorram:** The State-Of-The-Art In Acquiring And Processing Satellite Remotely Sensed Data Worldwide
- **Dr. Boutaba:** Distributed Pattern Matching: Concept and Applications in Internetscale networks
- **Dr. Daneshmand**: Ten Years of Experimentation in Information Mining & Software Research with applications in Telecommunications Industry

Session Chart

Day	Time	Agadir	Erfoud	Fes	Ouarzazate
Mon	11:00 AM - 12:45 PM	Optical Networks	Service Oriented Architecture	MAC Rate Adaptation and TCP	Data Mining I
	02:15 PM - 04:00 PM	Cellular and Mobile Communications I	Secured Networks I	Mesh Networks I	<u>Secured</u> Systems
	04:30 PM - 06:00 PM	Cellular and Mobile Communications II	Secured Networks II	<u>Mesh Networks II</u>	Architecture
Tue	10:15 AM - 12:00 PM	Peer to Peer	Applications in Computers and Communications I	<u>Wireless Network</u> <u>Models</u>	<u>Data Mining II</u>
	02:15 PM - 04:00 PM	<u>Mobility I</u>	Applications in Computers and Communications II	Data Communications I	Software & Applications
	04:30 PM - 06:00 PM	<u>Mobility II</u>	Network Management	Data Communications	Document Retrieval
Wed	10:15 AM - 12:00 PM	Quality of Service I	Routing I	Sensor Networks I	Image Processing
	02:15 PM - 04:00 PM	Quality of Service II	Routing II	Sensor Networks II	<u>Systems</u>
	04:30 PM - 06:00 PM	VoIP, Multicast, and Load Balancing		Sensor Networks III	

Monday, July 7, 10:15 AM - 12:00 PM

Optical Networks

Chair: Burak Kantarci (Istanbul Technical University, Turkey) Room: Agadir

On Controlling Burst Loss Ratio Inside an OBS Network

Wael Hosny Fouad Aly (University of Quebec in Montreal, Canada); Mohamed Faten Zhani (UQAM-Canada, ENSI-Tunisia, Canada); Halima Elbiaze (University of Quebec at Montreal, Canada)

Performance Evaluation of Routing and Wavelength Assignment Algorithms For Optical <u>Networks</u>

Eun-sung Jung (University of Florida, USA); Yan Li (University of Florida, USA); Sanjay Ranka (University of Florida, USA); Sartaj Sahni (University of Florida, USA) <u>Arranging Shareability Dynamically for the Availability-Constrained Design of Optical</u>

Transport Networks

Burak Kantarci (Istanbul Technical University, Turkey); Hussein Mouftah (University of Ottawa, Canada); Sema Oktug (Istanbul Technical University, Turkey)

A Novel Distributed Destination Routing Based Availability-Aware Provisioning Framework for Differentiated Protection Services in Optical Mesh Networks

Emad Al-Sukhni (University of Ottawa, Canada); Hussein Mouftah (University of Ottawa, Canada)

On the Application of Long SOAs in Linear Operating and Saturation Regimes: Exploitation in High Bit Rate Optical Networks

Youssef Said (National Engineering School of Tunis (ENIT), Tunisia); Houria Rezig (National Engineering School of Tunis (ENIT), Tunisia); Ammar Bouallegue (SysCom Lab, ENIT,, Tunisia)

Using Adapted Visibility Graphs for Network Planning

Branka Lakic (Instituto de Telecomunicações, Portugal)

Service Oriented Architecture

Chair: Reza Peyrovian (AT&T, USA) Room: Erfoud

Autonomous Preference-aware Multi-service Integration and Allocation

Xiaodong Lu (Tokyo Institute of Technology, Japan)

Automating media processes in a Service Oriented Architecture

Dietrich Van der Weken (VRT, Belgium); Stein Desmet (Ghent University, Belgium); Bjorn Muylaert (VRT, Belgium); Steven Van Assche (VRT MediaLab, Belgium); Bruno Volckaert (University of Ghent, Belgium)

Towards Business Model and Technical Platform for the Service Oriented Context-Aware Mobile Virtual Communities

Pravin Pawar (University of Twente, The Netherlands., The Netherlands); Julien Subercaze (INSA Lyon, France); Pierre Maret (INSA Lyon, France); Bert-Jan van Beijnum (University of Twente, The Netherlands); Dimitri Konstantas (University of Geneva, Switzerland)

A user-centric composition model for the Internet of Services

Antonio Corradi (University of Bologna, Italy); Enrico Lodolo (University of Bologna, Italy); Stefano Monti (University of Bologna, Italy); Samuele Pasini (University of Bologna, Italy)

MAC Rate Adaptation and TCP

Chair: Andrea Zanella (University of Padova, Italy) Room: Fes

An Efficient Rate Adaptation Scheme for Multihop Wireless Networks Using Kalman Filter Basel Alawieh (Concordia University, Canada); Yongning Zhang (Concordia University, Canada); Chadi Assi (Concordia University, Canada); Hussein Mouftah (University of Ottawa, Canada) Rate Adaptation Algorithms for IEEE 802.11 Networks: A Survey and Comparison Shaoen Wu (Auburn University, USA); Saad Biaz (Auburn University, USA) A Robust Controller for the TCP Congestion Window Cire Sall (Faculty of Science and Technology of Marrakesh, Morocco) A Dynamic Rate Adaptation with Fragmentation MAC Protocol against Channel Variation for Wireless LANs Kuei-Ping Shih (Tamkang University, Taiwan); San-Yuan Wang (I-Shou University, Taiwan); Chien-Min Chou (Tamkang University, Taiwan); Li-Jie Cheng (Tamkang University, Taiwan) Adaptive Window Size to Reduce the Influence of Heterogeneous Mobility on TCP Performance Pablo Vidales (Deutsche Telekom Laboratories, Germany); Frank Steuer (Technische Universität Berlin, Germany); Albayrak Sahin (Technische University, Germany) \$F^2\$-TCP: A Fairer and TCP-Friendlier Congestion Control Protocol for High-Speed Networks Shan Chen (The Hong Kong University of Science and Technology, Hong Kong); Junhua Zhu (The Hong Kong University of Science and Technology, Hong Kong); Brahim Bensaou (The Hong Kong University of Science and Technology, Hong Kong); Farid Naït-Abdesselam (University of Sciences and Technologies of Lille, France) Evaluating and Improving the TCP/UDP Performances of IEEE 802.11(p)/1609 Networks Shie-Yuan Wang (National Chiao Tung University, Taiwan, Taiwan); Hsi-Lu Chao (National Chiao Tung University, Taiwan); Kuang-Che Liu (National Chiao Tung University, Taiwan); Ting-Wei He (National Chiao Tung University, Taiwan); Chih-Che Lin (National Chiao Tung University, Taiwan); Chih-Liang Chou (National Chiao Tung University, Taiwan)

Data Mining I

Chair: Khaled Ali (Queen's University, Canada) Room: Ouarzazate

A Double K-Clustering Approach for Restructuring Distributed Object-Oriented Software

Safwat Hamad (Faculty of Computer and Information Sciences, Egypt); Tahany Fergany (Computer Sc. Dept, Univ. of New Haven, USA); Reda Ammar (University of Connecticut, USA); Amal Abdel-raouf (Southern Connecticut State University, USA)

Mining Drug Targets based on Microarray Experiments

Hisham ElShishiny (IBM, Egypt); Taysir Hassan (Assiut University, Egypt); Mohamed El-Asmar (IBM Cairo CAS, Egypt)

Mining Software Aging: A Neural Network Approach

Hisham ElShishiny (IBM, Egypt); Sally Deraz (IBM Cairo Technology Development Center, Egypt); Omar Bahy (Ottawa University, Canada)

Investigation of Feature Dimension Reduction based DCT/SVM for Face Recognition

Aouatif Amine (Mohammed V University, Morocco); Sanaa Ghouzali (Mohammed V University, Morocco); Mohammed Rziza (University Mohammed V, Morocco); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco)

Monday, July 7, 2:15 PM - 4:00 PM

Cellular and Mobile Communications I

Chair: Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco) Room: Agadir

Power-Controlled Rate and Coverage Adaptation for WCDMA Cellular Networks

Khaled Ali (Queen's University, Canada); Hossam Hassanein (Queen's University, Canada); Hussein Mouftah (University of Ottawa, Canada)

Uplink Call Admission Control in Multi-services W-CDMA Network

Rachid El-Azouzi (LIA/CERI Universite of Avignon, France); Khalil Ibrahimi (University of Avignon, France); Bouyakhf Houssine (Université Mohammed V Agdal, Morocco)

A Resource Allocation Algorithm and System Architecture to Extend the Cell Coverage and Alleviate the Inter-Cell Interference

Woonsik Lee (KAIST (Korea Advanced Institute of Science and Technology), Korea); Minh-Viet Nguyen (Korean Advanced Institute of Science and Technology, Korea); Hwang Soo Lee (KAIST, Korea)

A Study on Optimal Termination Target of Synchronous H-ARQ for the Next Generation Cellular System

Toshihiko Komine (KDDI R&D Labs., Inc., Japan); Satoshi Konishi (KDDI R&D Laboratories Inc., Japan); Hiroyuki Shinbo (KDDI R&D Laboratories, Japan)

Secured Networks I

Chair: Josep Selga (University Ramon Llull, Spain) Room: Erfoud

Analyzing a Human-based Trust Model for Mobile Ad Hoc Networks

Pedro Velloso (Paris VI, France); Rafael Laufer (University of California at Los Angeles, USA); Otto Duarte (Universidade Federal do Rio de Janeiro, Brazil); Guy Pujolle (University of Paris 6, France)

A Sybilproof Distributed Identity Management for P2P Networks

François Lesueur (SUPELEC, France); Ludovic Me (Supelec, France); Valérie Viet Triem Tong (Supelec, France)

An analysis of ASMA performances against packet dropping attacks in dense networks

Vincent Toubiana (Ecole Nationale Superieure des Telecommunications, France); Houda Labiod (ENST, France); Yvon Gourhant (France Telecom R&D, France); Laurent Reynaud (Orange Labs, France)

The Impact of Wireless LAN Security on Performance for Different Windows Operating Systems

Samad Kolahi (Unitec Institute of Technology, New Zealand)

Mesh Networks I

Chair: Azzedine Boukerche (Univ. of Ottawa, Canada) Room: Fes

Efficient Routing in WiMax/802.16 based Mesh Networks with Centralized Scheduling. Jad El-Najjar (Concordia University, Canada); Brigitte Jaumard (Concordia University, Canada); Chadi Assi (Concordia University, Canada)

Distributed Channel Assignment for Multi-Radio Wireless Mesh-Networks

Mesut Guenes (FU Berlin, Germany); Sadeq Makram (RWTH Aachen University, Germany)

Managing Community Aware Wireless Mesh Networks

João Paulo Barraca (University of Aveiro, Portugal); Rui Aguiar (University of Aveiro, Portugal)

Header Compression for VoIP Over Multi-hop Wireless Mesh Networks

Andrea Giordanna Nascimento (Federal University of Amazonas, Brazil); Edjair Mota (Federal University of Amazonas, Brazil); Saulo Queiroz (Federal University of Amazonas, Brazil); Arlen Nascimento (Federal University of Amazonas, Brazil); Edjard Mota (Federal University of Amazonas, Brazil); Edson Nascimento (Federal University of Amazonas, Brazil)

Mesh Topology Viewer (MTV): an SVG-Based Interactive Mesh Network Topology Visualization Tool

Rafael Valle (Federal Fluminense University, Brazil); Debora Muchaluat-Saade (Universidade Federal Fluminense, Brazil); Diego Passos (Universidade Federal Fluminense, Brazil); Celio Albuquerque (Fluminense Federal University, Brazil)

Secured Systems

Chair: Seong Mun (Georgetown University, USA) Room: Ouarzazate

Highly Compressed Aho-Corasick Automata For Efficient Intrusion Detection
Xinyan Zha (University of Florida, USA); Sartaj Sahni (University of Florida, USA)
Efficient Disk Encryption and Verification through Trusted Nonce
Fangyong Hou (National University of Defense Technology, P.R. China); Dawu Gu
(Shanghai Jiao Tong University, P.R. China)
Fast Multiplication Techniques for Public Key Cryptography
Michael Kounavis (Intel Corporation, USA); Vinodh Gopal (Intel Corporation, USA);
Satyajit Grover (Intel Corporation, USA)
UBSF: A Novel Online URL-Based Spam Filter
Yang Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
Evaluation of Resilience for Distributed Data Centers
Yehia Khalil (University of Louisville, USA); Adel Elmaghraby (University of Louisville,
USA); Anup Kumar (University Of Louisville, USA)
Building a Secure Medical Research Organization
Adil Alaoui (Georgetown University Medical Center, USA); Seong Mun (Georgetown
University, USA)

Monday, July 7, 4:30 PM - 6:00 PM

Cellular and Mobile Communications II

Chair: Ali Hurson (Missouri University of Science and Technology, USA) Room: Agadir

A New Approach for Efficient MBMS Service Provision in UTRAN

Christoforos Christoforou (University of Cyprus, Cyprus); Andreas Pitsillides (University of Cyprus, Cyprus)

An Enhanced approach for Efficient MBMS Handovers in 3G Networks

Christoforos Christoforou (University of Cyprus, Cyprus); Andreas Pitsillides (University of Cyprus, Cyprus)

Power Counting for Optimized Capacity in MBMS Enabled UTRAN

Andreas Panayides (University of Cyprus, Cyprus); Christoforos Christoforou (University of Cyprus, Cyprus); Josephina Antoniou (University of Cyprus, Cyprus); Andreas Pitsillides (University of Cyprus, Cyprus); Vasos Vassiliou (University of Cyprus, Cyprus)

Access Control in Group Communication Systems Oi Li (Tsinghua University, P.R. China)

Secured Networks II

Chair: Mazen Khair (University of Ottawa, Canada) Room: Erfoud

FlexBox: Sandboxing Internet Servers based on Layer-7 Contexts

Ayumu Tanoue (Keio University, Japan); Makoto Shimamura (Keio University, Japan); Miyuki Hanaoka (Keio University, Japan); Kenji Kono (Keio Univ., Japan) <u>A Two-Level Source Address Spoofing Prevention based on Automatic Signature and</u> Varification Machanism

Verification Mechanism

Jun Bi (Tsinghua University, P.R. China)

An Unsupervised Network Anomaly Detection Approach by K-Means Clustering & ID3 Algorithms

Yasser Yasami (Amirkabir University of Technology, Iran)

Mesh Networks II

Chair: Wessam Ajib (Universite de Quebec a Montreal, Canada) Room: Fes

End-to-end Shared Restoration Algorithms in Multi-domain Mesh Networks

Zhiying Gao (Lakehead University, Canada); Hassan Naser (Lakehead University, Canada)

High Throughput Path Selection Mechanism for Multi-Path Video Streaming in Ad-Hoc <u>Networks</u>

Ahmed Abd El Al (City University of New York, USA); Tarek Saadawi (The City College/The City University of New York, USA)

A Load aware Routing Metric for Wireless Mesh Networks

Lan Tien Nguyen (Japan Advanced Institute of Science and Technology, Japan); Razvan Beuran (National Institute of Information and Communications Technology, Japan); Yoichi Shinoda (Japan Advanced Institute of Science and Technology, Japan)

CLE^2aR^2: A Cross-Layer Energy-Efficient and Reliable Routing Protocol for Wireless Ad Hoc Networks

Kuei-Ping Shih (Tamkang University, Taiwan); Hung-Chang Chen (Tamkang University, Taiwan); Chun-Chih Li (Tamkang University, Taiwan); Hsiang-I Chen (Tamkang University, Taiwan)

Architecture

Chair: Tarek El-Ghazawi (The George Washington University, USA) Room: Ouarzazate

Pro-active Task Sharing in a Self-organizing Server Cluster

Samah Senbel (Arab Academy for Science and Technology, Egypt) Model for On-Demand Virtual Computing Architectures - OVCA

Alejandra Rodriguez (Universidad Carlos III de Madrid, Spain); Javier Fernandez (Universidad Carlos III de Madrid, Spain); Jesus Carretero (Universidad Carlos III de Madrid, Spain)

Performance Modeling of A Grid-based Data Distributed Management Protocol

Yunfeng Gu (University of Ottawa, Canada); Azzedine Boukerche (Univ. of Ottawa, Canada)

Improving Reliability and Energy Efficiency of Disk Systems via Utilization Control

Kiranmai Bellam (Auburn University, USA); Xiao Qin (Auburn University, USA); Adam Manzanares (Auburn University, USA); Xiaojun Ruan (Auburn University, USA); Yiming Yang (Intel Corporation, USA)

The Impact of Interconnection Networks and Applications Granularity to Compound Cluster Configurations

Mario Dantas (UFSC, Brazil); Rodrigo Mendonça (Federal University of Santa Catarina (UFSC), Brazil); Luiz Carlos Pinto (Federal University of Santa Catarina, Brazil) Building Efficient Multi-Core Clusters for High Performance Computing

Luiz Carlos Pinto (Federal University of Santa Catarina, Brazil); Luiz Henrique Tomazella (Federal University of Santa Catarina, Brazil); Mario Dantas (UFSC, Brazil)

Tuesday, July 8, 10:15 AM - 12:00 PM

Peer to Peer

Chair: Bert-Jan van Beijnum (University of Twente, The Netherlands) Room: Agadir

Countering Sinkhole and Black hole Attacks on Sensor Networks using Dynamic Trust Management

Subhrabrata Choudhury (National Institute of Technology-Durgapur, India) <u>A Proactive Burst Assembly Algorithm for Optical Burst Switched Network</u> Subhrabrata Choudhury (National Institute of Technology-Durgapur, India); Narayan Debnath (Winona State University, USA)

Wireless Network Models

Chair: Nicola Altan (University of Duisburg-Essen, Germany) Room: Fes

Modeling Wireless Channel for Ad-Hoc Network Routing Protocol

Tarek Saadawi (The City College/The City University of New York, USA); Merlinda Drini (City College of the City University of New York, USA)

A queuing analysis of packet dropping for Real-Time Applications

Rachid El-Azouzi (LIA/CERI Universite of Avignon, France); Abdellatif Kobbane (Université d'Avignon, France); Bouyakhf Houssine (Université Mohammed V Agdal, Morocco)

Multicast in Wireless Erasure Networks with Feedback

Sriram Vishwanath (University of Texas at Austin, USA); Chong Jiang (University of Texas at Austin, USA); Brian Smith (University of Texas at Austin, USA); Babak Hassibi (California Institute of Technology, USA)

Impact Evaluation of Radio Propagation Models on Performance Parameters of Application Layer in Wireless Mesh Backbone Simulation

Saulo Queiroz (Federal University of Amazonas, Brazil); Arlen Nascimento (Federal University of Amazonas, Brazil); Edjair Mota (Federal University of Amazonas, Brazil); Andrea Giordanna Nascimento (Federal University of Amazonas, Brazil); Leandro Carvalho (Federal University of Amazonas, Brazil); Edson Nascimento (Federal University of Amazonas, Brazil);

Data Mining II

Chair: Hichem Frigui (University of Louisville, USA) Room: Ouarzazate

Document Clustering Based on Diffusion Maps and a Comparison of the k-means performances in various spaces

Fadoua Ataa Allah (University Mohamed V - Agdal, Morocco); William Grosky (U of Michigan, USA); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco)

Semi-Supervised Clustering and Aggregation of Relational Data

Hichem Frigui (University of Louisville, USA)

Tuesday, July 8, 2:15 PM - 4:00 PM

Mobility I

Chair: Bert-Jan van Beijnum (University of Twente, The Netherlands) Room: Agadir

Session Mobility in the Mockets Communication Middleware

Cesare Stefanelli (University of Ferrara, Italy); Mauro Tortonesi (University of Ferrara, Italy); Erika Benvegnù (Florida Institute for Human & Machine Cognition, Italy); Niranjan Suri (Florida Institute for Human & Machine Cognition, USA)

Release of Unnecessary Resource Reservation in Mobility Cases

Lin Hai (Telecom Paris (ENST, France), France); Houda Labiod (ENST, France) Interface Selection Mechanisms in Multi-Homed Mobile Nodes using Game Theory

Omar Raoof (Brunel University, United Kingdom)

A Reference Architecture for Micro-Mobility Support in IP Networks

Rodrigo Prado (State University of Campinas, Brazil); Eduardo Zagari (State University of Campinas, Brazil); Tomás Badan (Federal University of Goiás, Brazil); Eleri Cardozo (State University of Campinas - School of Electrical and Computer Engineering, Brazil); Maurício Magalhães (University of Campinas (Unicamp), Brazil); José Carrilho (State University of Campinas, Brazil); Rossano Pinto (State University of Campinas - School of Electrical and Computer Engineering, Brazil); André Berenguel (State University of Campinas, Brazil); Daniel Barboza (State University of Campinas, Brazil); Daniel Moraes (State University of Campinas, Brazil); Thienne Johnson (State University of Campinas - School of Electrical and Computer Engineering, Brazil); Thienne Johnson (State University of Campinas - School of Electrical and Computer Engineering, Brazil); Lars Westberg (Ericsson Research, Sweden)

Pitfalls and Tradeoffs on Dealing with Handoff Management in Bluetooth-based WPANs for Real-Time Applications

Loreno Oliveira (Federal University of Campina Grande, Brazil); Leandro da Silva (Paraíba State University, Brazil); Kyller Gorgônio (Federal University of Campina Grande, Brazil); Angelo Perkusich (Federal University of Campina Grande, Brazil)

Applications in Computers and Communications II

Chair: Narayan Debnath (Winona State University, USA) Room: Erfoud

Using Path Length Measure for Gene Clustering Based on Similarity of Annotation Terms Anurag Nagar (University of Houston-Clear lake, USA); Hisham Al-Mubaid (University of Houston-Clear lake, USA) <u>Towards Sound development of PIXITP</u> Hazem El-Gendy (Assistant Minister, Egypt) <u>Combining Multiple Segmentation Methods for</u> Sultan Aljahdali (Taif University, Saudi Arabia)

Metrics Applied to Aspect Oriented Design using UML Profiles

Narayan Debnath (Winona State University, USA); Daniel Riesco (Universidad Nocional de San Luis, Argentina); German Montejano (Universidad Nocional de San Luis, Argentina)

An Interoperability Approach Based on Asynchronous Replication Among Distributed Internet Databases

Mario Dantas (UFSC, Brazil); Douglas Macedo (Federal University of Santa Catarina, Brazil)

Data Communications I

Chair: Mohamed Faten Zhani (UQAM-Canada, ENSI-Tunisia, Canada) Room: Fes

Model for Polling in Noisy Multihop Systems with Application to PLC and AMR Josep Selga (University Ramon Llull, Spain)

A New Signal Separation Technique Using Double Referenced System

JBARI ATMAN (university mohamed V, Morocco); Abdellah Adib (institut scientifique, Morocco); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco) <u>A Graph Theory Based Scheduling algorithm For MIMO-CDMA sytstem Using Zero Forcing</u> Beamforming

Elmahdi Driouch (Universite du Quebec à Montreal, Canada); Wessam Ajib (Universite de Quebec a Montreal, Canada)

Performance Analysis for Resource Coordination in a High-density Wireless Environment

LI Zheng (University of Technology, Sydney, Australia); Doan Hoang (University of Technology, Sydney, Australia)

MC-CDMA Multiuser Detection Using a Hybrid Immune Clonal Selection Algorithm with Hopfield Neural Network in Fading Channels

Binbin Xu (Beijing Institute of Technology, P.R. China); Jianping An (Beijing Institute of Technology, P.R. China); Zhongxia He (Beijing Institute of Technology, P.R. China)

Software & Applications

Chair: Mohamed El Ghami (University of Bergen, Norway) Room: Ouarzazate

Formal Specification of a Particular Banking Domain with RAISE Specification

Mohammad Nami (Shahid Beheshti University, Iran); Abbas Malekpour (University Of Rostock, Germany)

SSMS - A Secure SMS Messaging Protocol for the M-Payment Systems

Mohsen Toorani (Iran University of Science and Technology, Iran); Ali Asghar Beheshti (Iran University of Science and Technology, Iran)

Primal-Dual Algorithm for Linear Optimization Problems Based on a New Class of Kernel Functions

Mohamed El Ghami (University of Bergen, Norway); Ivan Ivanov (Delft University of Technology, The Netherlands); Hans Melissen (Delft University of Technology, The

Netherlands); Cornelis Roos (Delft University of Technology, The Netherlands); Trond Steihaug (University of Bergen, Norway)

Variability Modeling for Business Component Customization

Rajaa Saidi (Mohammed V-Agdal University, Morocco); Mounia Fredj (L@GI, Al Qualsadi Team, ENSIAS, Morocco); Salma Mouline (Gscm_Lrit, Morocco); Dominique Rieu (Lig-Sigma, France); Agnes Front (Lig-Sigma, France)

Efficient Sorting Algorithms for the Cell Broadband Engine

Sanguthevar Rajasekaran (University of Connecticut, USA); Reda Ammar (University of Connecticut, USA)

Tuesday, July 8, 4:30 PM - 6:00 PM

Mobility II

Chair: Jad El-Najjar (Concordia University, Canada) Room: Agadir

How Node Mobility Affects k-hop Cluster Quality in Mobile Ad Hoc Networks: a Quantitative Evaluation

Paolo Bellavista (University of Bologna, Italy); Eugenio Magistretti (Rice University, USA)

Implementation and Experimental Evaluation of a Fast Local Mobility Protocol

Susana Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal, Portugal)

An IMS Vertical Handoff Solution to Dynamically Adapt Mobile Multimedia Services

Paolo Bellavista (University of Bologna, Italy); Antonio Corradi (University of Bologna, Italy); Luca Foschini (University of Bologna, Italy)

Performance Testing of Mobile IPv6 Protocol

Wang Huiming (Tsinghua University, P.R. China); Xingang Shi (Tsinghua University, P.R. China); Zhiliang Wang (Tsinghua University, P.R. China); Yin Xia (Tsinghua University, P.R. China); Jianping Wu (Tsinghua University, P.R. China)

Network Management

Chair: Reza Peyrovian (AT&T, USA) Room: Erfoud

Measuring and Visualizing Interdomain Routing Dynamics with BGPATH

Luca Cittadini (Roma Tre University, Italy); Tiziana Refice (Roma Tre University, Italy); Alessio Campisano (Roma Tre University, Italy); Giuseppe Di Battista (Roma Tre University, Italy); Claudio Sasso (Roma Tre University, Italy)

Distributed Fault Localization for Multi-Domain All-Optical Networks with Partial Power Monitoring

Mazen Khair (University of Ottawa, Canada); Jun Zheng (University of Ottawa, Canada); Hussein Mouftah (University of Ottawa, Canada)

Design and Evaluation of a P2MP MPLS-based Hierarchical Service Management System

Kenji Kumaki (KDDI R&D Labs., Japan); Kenichi Nagami (Intec Netcore Inc., Japan); Ikuo Nakagawa (Intec Netcore Inc., Japan); Tomohiko Ogishi (KDDI R&D Lab., Japan); Shigehiro Ano (KDDI R&D Laboratories, Japan)

A Flexible Network Monitoring Tool based on a Data Stream Management System

Natascha Ligocki (Universidade Federal do Paraná, Brazil); Christian Lyra (Universidade Federal do Paraná, Brazil); Carmem Hara (Universidade Federal do Paraná, Brazil) Using Visualization Techniques for SNMP Traffic Analyses

Ewerton Salvador (UFRGS, Brazil); Lisandro Granville (Federal University of Rio Grande do Sul, Brazil)

Data Communications II

Chair: Abdallah Shami (The University of Western Ontario, Canada) Room: Fes

Blind MIMO Deconvolution Of Any Source Distributions Via High-Order

Manal Taoufiki (university Mohamed V, Morocco); Abdellah Adib (institut scientifique, Morocco); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco); Saad Biaz (Auburn University, USA)

Investigation on folded Patch Antenna for Cellular Applications

Adnane LATIF (National School of Sciences Applied, University Abdelemalek Essaadi, Tangier, Morocco); Rachid Hilal (University Cadi Ayyad, Morocco); Abdellah Ait Ouahman (University Cadi Ayyad, Morocco)

Comparison of CDMA Tele-traffic Models

Samad Kolahi (Unitec Institute of Technology, New Zealand)

Document Retrieval

Chair: Hichem Frigui (University of Louisville, USA) Room: Ouarzazate

A Novel Transliteration Technique in English-Arabic Cross Language Information Retrieval Bellaachia Abdelghani (George Washington University, USA); Ghita Amor-Tijani (George Washington University, USA)

Multi-word term indexing for Arabic document retrieval

SIHAM Boulaknadel (university mohamed V rabat, Morocco); Beatrice Daille (LINA, France); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco) OOV Words in an English-Arabic CLIR System

Bellaachia Abdelghani (George Washington University, USA); Ghita Amor-Tijani (George Washington University, USA)

Wednesday, July 9, 10:15 AM - 12:00 PM

Quality of Service I

Chair: Bert-Jan van Beijnum (University of Twente, The Netherlands) Room: Agadir

A Stateless Architectural Approach to Inter-domain QoS

Vítor Jesus (Institute of Telecommunications, Portugal); Rui Aguiar (University of Aveiro, Portugal); Peter Steenkiste (Carnegie Mellon University, USA)

Analysis of the EDCA access mechanism for an IEEE 802.11e-compatible wireless LAN Jose Gallardo (CICESE Research Center, Mexico); Sarai Cruz (CICESE Research Center, Mexico); Dimitrios Makrakis (University of Ottawa, Canada); Abdallah Shami (The University of Western Ontario, Canada)

A Vendor-Independent Resource Control Framework for WiMAX

Pedro Neves (Portugal Telecom Inovação, Portugal); Tuomas Nissilä (VTT Technical Research Centre of Finland, Finland); Telmo Pereira (IT-Aveiro, Portugal); Ilkka Harjula (VTT Technical Research Centre of Finland, Finland); João Monteiro (IT-Aveiro, Portugal); Kostas Pentikousis (VTT Technical Research Centre of Finland, Finland); Susana Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal, Portugal); Francisco Fontes (Portugal Telecom Inovacao, Portugal)

Distributed Quality-of-Service Routing of Best Constrained Shortest Paths. Abdelhamid Mellouk (University Paris XII, France)

Routing I

Chair: Shie-Yuan Wang (National Chiao Tung University, Taiwan) Room: Erfoud

Relaxed Min-Augmented Range Trees for the Representation of Dynamic IP Router Tables Christine Maindorfer (Albert-Ludwigs-Universitaet Freiburg, Germany); Bettina Bär (Albert-Ludwigs-Universitaet Freiburg, Germany); Thomas Ottmann (Albert-Ludwigs-Universitaet Freiburg, Germany) Bypass: Providing Secure DHT Routing through Bypassing Malicious Peers Marc Artigas (Rovira i Virgili University, Spain); Pedro Garcia-Lopez (University

A Partially Buffered Crossbar Packet Switching Architecture and Its Scheduling Lotfi Mhamdi (Delft University of Technology, The Netherlands)

Sensor Networks I

Chair: Hussein Mouftah (University of Ottawa, Canada) Room: Fes

Exploiting the Cloning Capability of Mobile Agents for Cost-Effective Data Fusion in Wireless Sensor Networks Aristides Mpitziopoulos (University of the Aegean, Greece); Damianos Gavalas (University of the Aegean, Greece); Charalampos Konstantopoulos (University of Patras, Greece); Grammati Pantziou (Technological Educational Institution of Athens, Greece)

On the self-healing properties of an extremely low power indoor metering network

Nicola Altan (University of Duisburg-Essen, Germany); Erwin Rathgeb (Universität Duisburg-Essen, Germany)

EATA: Effectiveness based Aggregation Time Allocation Algorithm for Wireless Sensor Networks

Wei Huangfu (Institute of Software, Chinese Academy of Science, P.R. China); Yan LIU (Peking University, P.R. China); Bin Duan (Institute of Software, Chinese Academy of Sciences, P.R. China); Limin Sun (Institute of Software, Chinese Academy of Sciences, P.R. China); Canfeng Chen (Nokia Research Center, P.R. China); Jian Ma (Nokia Research Center, P.R. China)

Image Processing

Chair: Fadoua Ataa Allah (University Mohamed V - Agdal, Morocco) Room: Ouarzazate

A New Approach of 3D Watermarking Based on Image Segmentation

Saoussen Ben Jabra (Sciences University of Tunis, Tunisia); Zagrouba Ezzeddine (ISI, Tunisia)

<u>A Robust Digital Image Watermarking Method Using Dual Tree Complex Wavelet Transform</u> Samira Mabtoul (Faculty of Sciences, Morocco); Ibn Elhaj Elhassane (National Institute of Post and Telecommunications (INPT) Rabat-Morocco, Morocco); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco)</u>

Using The Maximum Mutual Information Criterion To Textural Feature Selection For Satellite Image Classification

Mounir Ait Kerroum (Faculty of Sciences, Mohamed V-Agdal University, Morocco); Ahmed Hammouch (Faculty of Sciences, Mohamed V-Agdal University, Morocco); Driss Aboutajdine (GSCM_LRIT Mohammed V-agdal University, Morocco); Bellaachia Abdelghani (George Washington University, USA)

Automatic color Face tracking using gray information

Leila Essannouni (Fsr, Morocco); El hassane Ibn Elhaj (INPT, Morocco); Driss Aboutajdine (FSr, Morocco)

Wednesday, July 9, 2:15 PM - 4:00 PM

Quality of Service II

Chair: Rouzbeh Razavi (University of Essex, United Kingdom) Room: Agadir

Deterministic Service on IEEE 802.11-like Networks

Mario Baldi (Politecnico di Torino, Italy); Marco Papa Manzillo (Politecnico di Torino, Italy)

QoS-aware Application Layer Multicast

Bin Rong (RMIT University, Australia); Ibrahim Khalil (Faculty member, RMIT University, Australia); Zahir Tari (RMIT University, Australia)

Wavelet-based Geometry Coding for 3D Mesh Using Space Frequency Quantization

Walaa Sheta (Informatic Research Institute, MuCSAT, Egypt) Robustness Study of MBAC Algorithms

Anne Nevin (Norwegian University of Science and Technology, Norway); Yuming Jiang (Norwegian University of Science and Technology (NTNU), Norway); Peder Emstad (Norwegian University of Science and Technology, Norway)

Routing II

Chair: João Paulo Barraca (University of Aveiro, Portugal) Room: Erfoud

Flooding Zone Initialization Protocol (FZIP): Enabling Efficient Multimedia Diffusion for Multi-Hop Wireless Networks

Tarik Elamsy (University of Windsor, Canada); Randa El-Marakby (University of Windsor, Canada)

<u>Measuring Network Performance of Swarm Power Aware Routing Protocol for MANETs</u> Ahmed Nagy (American University in Cairo, Egypt)

A Reliability Aware Flooding Algorithm (RAFA) in Wireless Multi-hop Networks

Youndo Lee (Seoul National University, Korea); YoonBo Shim (Seoul National University, Korea); Yanghee Choi (Seoul National University, Korea); Taekyoung Kwon (Seoul National University, Korea)

Sensor Networks II

Chair: Luca Foschini (University of Bologna, Italy) Room: Fes

A spatial extension of TinyDB for wireless sensor networks

Luigi Pomante (University of L'Aquila, Italy); Paolino Di Felice (University of L'aquila, Italy); Massimo Ianni (University of L'Aquila, Italy)

A Reliable Synchronous Transportation Protocol for Wireless Image Sensor Networks

Azzedine Boukerche (Univ. of Ottawa, Canada); Yan Du (University of Ottawa, Canada); Jing Feng (University of Ottawa, Canada); Richard Pazzi (University of Ottawa, Canada)

Broadcast Routing in Wireless Sensor Networks with Dynamic Power Management

Paulo Sausen (University UNIJUI, Brazil); Marco Spohn (Federal University of Campina Grande, Brazil); Angelo Perkusich (Federal University of Campina Grande, Brazil)

Data Collection in Sensor Networks with Data Mules: an Integrated Simulation Analysis Giuseppe Anastasi (University of Pisa, Italy); Marco Conti (IIT-CNR, Italy); Mario Di Francesco (University of Pisa, Italy)

Systems

Chair: Carmem Hara (Universidade Federal do Paraná, Brazil) Room: Ouarzazate

A New Approach to Content-based File Type Detection

Mohsen Toorani (Iran University of Science and Technology, Iran); Mehdi Chehel Amirani (Iran University of Science and Technology (IUST), Iran); Ali Asghar Beheshti (Iran University of Science and Technology, Iran)

JaDE: A JXTA Support for Distributed Virtual Environments

Laura Ricci (University of Pisa, Italy); Luca Genovali (IMT, Italy) Transactional Agents for Pervasive Computing

Machigar Ongtang (Pennsylvania State University, USA); Ali Hurson (Missouri University of Science and Technology, USA); Yu Jiao (Oak Ridge National Laboratory, USA)

Wednesday, July 9, 4:30 PM - 6:00 PM

VoIP, Multicast, and Load Balancing Chair: Room: Agadir

Cooperative Load Balancing in IEEE 802.11 Networks with Cell Breathing

Eduard Garcia Villegas (Technical University of Catalonia (UPC), Spain); Rafael Vidal (Technical University of Catalonia (UPC), Spain); Josep Paradells (UPC, Spain)

ROHC and Aggregated VoIP over Fixed WiMAX: An Empirical Evaluation

Esa Piri (VTT Technical Research Centre of Finland, Finland); Jarno Pinola (VTT Technical Research Centre of Finland, Finland); Frerk Fitzek (Hamburg University of Technology, Germany); Kostas Pentikousis (VTT Technical Research Centre of Finland, Finland)

Efficient Failover and Load Balancing for Dependable SIP Proxy Servers

Yun-Jung Cheng (National Chiao Tung University, Taiwan); Kuochen Wang (National Chiao Tung University, Taiwan); Rong-Hong Jan (National Chiao Tung University, Taiwan); Chien Chen (National Chiao Tung University, Taiwan, Taiwan); Chia-Yuan Huang (Industrial Technology Research Institute, Taiwan)

Sensor Networks III

Chair: Jian Ma (Nokia Research Center, P.R. China) Room: Fes

Underwater Wireless Hybrid Sensor Networks

Kashif Ali (Queen's University, Canada); Hossam Hassanein (Queen's University, Canada)

Efficient Deployment of Surface-Level Gateways in Underwater Sensor Networks

Saleh Ibrahim (University of Connecticut, USA); Jun-Hong Cui (University of Connecticut, USA); Reda Ammar (University of Connecticut, USA)

Enlightness: An Enhanced and Lightweight Algorithm for Time-Space Localization in Wireless Sensor Networks

Azzedine Boukerche (Univ. of Ottawa, Canada); Horacio Oliveira (Federal University of Amazonas, Brazil); Eduardo Nakamura (FUCAPI - Research and Technological Innovation Center, Brazil); Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil)

AT-Angle: A Distributed Method for Localization using Angles in Sensor Networks

Abderrahim Benslimane (University of Avignon, France); Clément Saad (Université Montpellier 2 - LIRMM, France)