The 5th International Conference on

Innovations in Information Technology

http://www.it-innovations.ae

December 16-18, 2008
College of Information Technology, United Arab Emirates University
United Arab Emirates

CONFERENCE PROGRAM

DAY 1

Tuesday, 16th December 2008

07:30-11:00

07:30 – 11:00	
07:30-08:30	Registration/ light breakfast
09:00-10:30	Opening Ceremony (Auditorium)
	VIP Opening Address Provost Address - Wyatt R. Hume Keynote Address - Joe Wilson, Director of Academic Initiatives for Microsoft Keynote Address - Dharma P. Agrawal, Distinguished Professor, University. of Cincinnati

10:30 – 11:00
Coffee Break (Ground floor)

11:00 – 16:00
SP: Student Poster Session **(Poster Exhibition Hall)**
Chairs: **A. R. Al-Ali**, (American University of Sharjah, UAE); **Emad Mohamed** (UAE University, UAE)

11:00-13:00

11:00 – 13:00	
Session ID: BIO1 (Bioinformatics) **Room # 1**	
Chairs: **Martti Tammi,** (National University of Singapore, Singapore); **Sanja Lazarova-Molnar** (UAE University, UAE)	
HSRNAFold: A Harmony Search Algorithm for RNA Secondary Structure Prediction Based on Minimum Free Energy	Abdulqader Mohsen, Uni. of Science Malaysia, Malaysia Ahamad Tajudin Khader, Uni. of Sci. Malaysia, Malaysia Dhanesh Ramachandram, Uni. of Sci. Malaysia, Malaysia
A high-end Binary Search unit for SVM DNA Micro-Arrays	Ioannis Sotiropoulos, Technical Uni. of Crete, Greece Euripidis Sotiriadis, Technical Uni. of Crete, Greece Ioannis Papaefstathiou, Technical Uni. of Crete, Greece
New Support Vector Machine-based approach over DNA chip data	Ana Madevska-Bogdanova Uni. St. Cyril and Methodius, Macedonia Nevena Ackovska, Uni. St. Cyril and Methodius, Macedonia
A Web Services based Framework for Uniform Integration of Command-line Bioinformatics Software Tools	Elarbi Badidi, UAE University, UAE Larbi Esmahi, Athabasca University, Canda Mohamed Adel Serhani, UAE University, UAE Salah Bouktif, UAE University, UAE
Parallel Detection of Nucleic Acids Using an Electronic Chip	Leyla Soleymani, University of Toronto, Canada Edward H. Sargent, University of Toronto, Canada Shana Kelley, University of Toronto, Toronto, Canada
Protein Crystallization Prediction with a Combined Feature Set	Hui-Huang Hsu, Tamkang University, Taiwan

11:00 – 13:00	
Session ID: NET1 (Wireless Communication I) **Room # 2**	
Chairs: **Safuat Hamdy**, (UAE University, UAE)	
Blind Channel Identification for OFDM-based SIMO Systems	Faisal O. Alayyan, KUSTAR, UAE Raed Shubair, Etisalat University College, UAE Yee Hong Leung, Curtin University, Australia Abdelhak Zoubir, Darmstadt Uni. of Technology, Germany Omar Alketbi, KUSTAR, UAE
UEP for Wireless data Transmission Using Superposition Coding with Feedback	Walid Al-Hussaibi, University of Sussex, UK
Simulation Study for Effects of Attenuation and Interference in Cellular Mobile Systems With Application to UAE	Raed Shubair, Etisalat University College, UAE
Spatial Resource Analysis of Two Dimensional Barcodes	Subariah Ibrahim, Universiti Teknologi Malaysia, Malaysia
A Convolutionally Coded CDMA System with Transmit Diversity over Nakagami Fading Channels	Walaa Hamouda, Concordia University, Canada
Multiple Statistical Validations for Sensor Networks Optimization	Davood Shamsi, Rice University, USA Mehrdad Majzoobi, Rice University, USA Farinaz Koushanfar, Rice University, USA Negar Kiyavash, Uni. of Illinois at Urbana-Champaign, USA

11:00 – 13:00	
Session ID: COMP1 (Evolutionary, Parallel and Distributed Computing Systems) **Room # 3**	
Chairs: **Fathi M. Allan** (UAE University, UAE); **AbdulMutalib Wahaishi** (UAE University, UAE)	
Multi-dimensional Particle Swarm Optimization for Dynamic Environments	Serkan Kiranyaz, Tampere Uni. of Technology, Finland Jenni Pulkkinen, Tampere Uni. of Technology, Finland Moncef Gabbouj, Tampere Uni. of Technology, Finland
Hermitian and Skew-Hermitian Splitting Methods for Streamline Upwind Petrov-Galerkin Approximations of a Grid-Aligned Flow Problem	Sameer Sunhaloo, Uni. of Technology, Mauritius Jeetendre Narsoo, Uni. of Technology, Mauritius Ashvin Gopaul, Uni. of Technology, Mauritius Muddun Bhuruth, Uni. of Technology, Mauritius
Visual Feedback for Design-Space Exploration with UML MARTE	Andreas Liehr, Universität der Bundeswehr Germany Klaus Buchenrieder, Universität der Bundeswehr Germany Ulrich Nageldinger, Infineon Technologies AG, Germany
A Fast Token Based Algorithm for Multiple Resources Sharing in Distributed Systems	Tahar Allaoui, University of Laghouat, Algeria Mohamed Yagoubi, University of Laghouat, Algeria Mohamed Djoudi, University of Laghouat, Algeria Youcef Ouinten, University of Laghouat, Algeria
Trust-Privacy Tradeoffs in Distributed Computing	Rima Deghaili, American University of Beirut, Lebanon Ali Chehab, American University of Beirut, Lebanon Ayman Kayssi, American University of Beirut, Lebanon

11:00 – 13:00	
Session ID: IS1 (Web Services I) **Room # 4**	
Chairs: **Lilia Kakaradova** (Zayed University, UAE); **Faheem Ahmed**, (UAE University, UAE)	
A Domain-Driven Approach for Enterprise Development, using BPM, MDA, SOA and Web Services	Fabio Marzullo, Federal University of Rio de Janeiro, Brazil
Web Retrieval Improvement: Using Pattern Detection	Milos Kudelka, Tech. Uni. of Ostrava, Czech Republic Vaclav Snasel, Tech. Uni. of Ostrava, Czech Republic Hussam Abdulla, Tech. Uni. of Ostrava, Czech Republic Ondrej Lehecka, Tech. Uni. of Ostrava, Czech Republic Saleh Alwahaishi, Tech. Uni. of Ostrava, Czech Republic
smartCQ: Answering and Evaluating Bounded Continuous Search Queries within the WWW and Sensor Networks	Nils Hoeller, University of Luebeck, Germany Christoph Reinke, Institute of Info. Systems, Germany Dirk Kukulenz, Institute of Info. Systems, Germany Volker Linnemann, Institute of Info. Systems, Germany
Towards a Semantic Composition of ebXML Business Processes	Hioual Ouassila, Mentouri Uni. of Constantine, Algeria Boufaida Zizette, Mentouri Uni. of Constantine, Algeria
Developing Message-Based Trust Model for Web Applications	Mohammad Sharifnia, Azad University, Iran Azadeh Iranmehr, Shiraz University, Iran Mahmood Doroodchi, Cardinal Stritch University, US

11:00 – 13:00
Session ID: Tutorial 1 (The U-City Shaped: The Experience of Samsung in Developing Ubiquitous City Projects) **Room # 5**
Speaker: Joon Sik Kim

13:00-14:00
Lunch ((Ground floor)

14:00 – 16:00

14:00– 16:00	
Session ID: HC1 (Healthcare Informatics) **Room # 1**	
Chairs: **Syed Haque**, (Uni. of Medicine and Dentistry of New Jersey, USA); **Sami Shaban**, (UAE University, UAE)	
Microbial drug target identification using different computational approaches: Specific application to Pseudomonas aeruginosa	Deepak Perumal, Nanyang Technological Uni., Singapore
Image Adaptive Semi-fragile Watermarking Scheme Based on RDWT-SVD	Hossein Kourkchi, Sharif Uni. of Technology, Iran Shahrokh Ghaemmaghami, Sharif Uni. of Technology, Iran
A Wireless Health Care Monitoring System	Assim Sagahyroon, American University of Sharjah, UAE
Modern Biotelemetric System Architecture and Implementations Highlights	Jindrich Cernohorsky, Tech. Uni. of Ostrava, Czech Republic Ondrej Krejcar, Tech. Uni. of Ostrava, Czech Republic Petr Fojcik, Tech. Uni. of Ostrava, Czech Republic Dalibor Janckulik, Tech. Uni. of Ostrava, Czech Republic Jan Martinovic, Tech. Uni. of Ostrava, Czech Republic
Research Review on the Biological Effect of Cell Phone Radiation on Human	Ashraf Aly, Universiti Teknologi Malaysia, Malaysia Safaai Deris, Universiti Teknologi Malaysia, Malaysia Nazar Zaki, UAE University, UAE

14:00-16:00	
Session ID: NET2 (Communication Networks) **Room # 2**	
Chairs: **Wathiq Mansoor**, (American Uni. Dubai, UAE); **Imad Jawhar** (UAE University, UAE)	
Fast Fault Localization in Optical WDM Networks	Mahdi Khani Dehnoi, Yazd University, Iran Mohammad Ghasemzadeh, Yazd University, Iran Morteza Khani Dehnoi, Isfahan University, Iran
Energy Optimization in Mobile TV Broadcast Networks	Mohamed Hefeeda, Simon Fraser University, Canada Cheng-Hsin Hsu, Simon Fraser University, Canada
Interference Measurements by Power Line Communications over HF Aeronautical Systems	Claiton Colvero, National Institute of Metrology, Brazil Vinícius Carneiro, National Institute of Metrology, Brazil Braulio Cunha, Universidade Católica de Petrópolis, Brazil Pedro Gonzalez Castellanos, INMETRO, Brazil
Overlay Multicast Tree Configuration Protocol with Bandwidth Reservation	Hiroaki Higaki, Tokyo Denki University, Japan Hirokazu Obata, Tokyo Denki University, Japan
Energy-Aware Distributed Algorithm for Virtual Backbone in Wireless Sensor Networks	Hassan Raei, University of Yazd, Iran
Evaluation of Fault Tolerant Mobile Agents in Distributed Systems	Hojatallah Hamidi, Iran Uni. of Science & Technology, Iran

14:00-16:00	
Session ID: COMP2 (Signal Processing and Pattern Recognition) **Room # 3**	
Chairs**: Imad Barhumi** (UAE University, UAE); **Tamer Rabie** (UAE University, UAE)	
Complexity-Reduced Decoding Algorithm for Unmodulated Parallel-Combinatory High-Compaction Multicarrier Modulation Signals	Ryuji Hayashi, Kochi Uni. of Technology, Japan Masanori Hamamura, Kochi Uni. of Technology, Japan
Performance of Fully Software and Hardware Accelerated XML Processing and Securing	Tomas Knap, Charles University, Czech Republic Irena Mlynkova, Charles University, Czech Republic Martin Necasky, Charles University, Czech Republic
Scale Adaptive Local Illumination Normalization	Tomas Maul, MIMOS Bhd., Malaysia Ahmed A. Bahaa Al-Deen, MIMOS Bhd., Malaysia
Generation of Arabic Phonetic Dictionaries for Speech Recognition	Mohamed Ali, KFU Petrol & Minerals, Saudi Arabia Moustafa Elshafei, KFU Petrol & Minerals, Saudi Arabia Mansour Alghamdi, KACST, Saudi Arabia Husni Al-Muhtaseb, KFU Petrol & Minerals, Saudi Arabia Atef Al-Najjar, KFU Petrol & Minerals, Saudi Arabia
Frequency Domain Concurrent Error Detection in DSP Systems	Rasoul Yousefi, University of Tehran, Iran

14:00-16:00	
Session ID: IS2 (Web Services II) **Room # 4**	
Chairs: **Rachida Dssouli**, (Concordia Univ., Canada); **Mohamed Adel Serhani**, (UAE University, UAE)	
Automatic QoS Adaptation for Composite Web Services	Ming Qiao, Concordia University, Canada Ferhat Khendek, Concordia University, Canada Mohamed Adel Serhani, UAE University, UAE Rachida Dssouli, Concordia University, Canada Roch Glitho, Ericsson Canada, Canada
Web 2.0 Applications – An Approach to Testing	Rajesh Barde, MindTree Ltd., India Gopal Chakravarthy, MindTree Ltd., India
An Extensible Model for Improving the Privacy of Web Services	Mona Tavakolan, Iran Uni. of Science and Tech., Iran Maryam Zarreh, Iran Uni. of Science and Tech., Iran Mohammad A. Azgomi Iran Uni. of Science and Tech., Iran
NABU: A Macedonian Web Search Portal	Igor Janevski, ITEA Solutions, Ltd., Macedonia K. Takasmanov, Faculty of Man. & Info. Tech. Macedonia Jovan Pehcevski, Faculty of Man. & Info. Tech. Macedonia
Organizational Challenges of the Semantic Web in Digital Libraries	Bendik Bygstad, Norwegian School of IT, Norway Gheorghita Ghinea, Brunel University, UK Geir-Tore Klaebo, G2 Consulting, Norway

14:00-16:00
Session ID: Tutorial 2 (Technology as a driver of innovation and catalyst for growth) **Room # 5**
Speaker: **Mark Walker**, Microsoft

16:00 – 18:00

16:00-18:00	
Session ID: NET3 (Wireless Sensor Networks I) **Room # 1**	
Chairs: **Raed Shubair,** (Etisalat Uni. Col.,UAE); **Yasser Ghadallah** (UAE University, UAE)	
On the Use of Wireless Sensor Networks to Cope with Partitions in Mobile Ad-Hoc Networks	Anwar Hamra, INRIA Sophia Antipolis-France, France
Service Requirements for Actor-Actor Coordination through Sensor Nodes in Wireless Sensor Actor Networks	Saeed Sedighian, Iran Uni. of Science and Technology, Iran Mohsen Sharifi Iran Uni. of Science and Technology, Iran Vahid Azhari Iran Uni. of Science and Technology, Iran Hossein Momeni Iran Uni. of Science and Technology, Iran
Efficient Clustering of Wireless Sensor Networks Based on Memetic Algorithm	Ali-Asghar Salehpour, University of Tehran, Iran Ali Afzali-Kusha, University of Tehran, Iran Siamak Mohammadi, University of Tehran, Iran
On Energy Efficient Routing for Wireless Sensor Networks	Jamal Al-Karaki (The Hashemite University, USA
A Power Efficient Routing Approach for Cluster-Based Wireless Sensor Networks	Ali-Asghar Salehpour, University of Tehran, Iran Babak Mirmobin, University of Tehran, Iran Ali Afzali-Kusha, University of Tehran, Iran Siamak Mohammadi, University of Tehran, Iran
Hop-by-Hop or Longer Hops: The Energy Perspective	Farinaz Koushanfar, Rice University, USA Negar Kiyavash, Uni. of Illinois at Urbana-Champaign, USA

16:00-18:00	
Session ID: COMP3 (Artificial Intelligence Systems) **Room #2**	
Chairs: **Naser Qamhieh**, (UAE University, UAE); **Falah Awwad**, (UAE University, UAE)	
Extracting Persons Names from Arabic Newspaper	Ali El-sebai, University of Salford, UK Farid Meziane, University of Salford, UK
Fast String Matching with Space-efficient Word Graphs	Susumu Yata, University of Tokushima, Japan Kazuhiro Morita, University of Tokushima, Japan Masao Fuketa, University of Tokushima, Japan Jun-ichi Aoe, University of Tokushima, Japan
Solving Traveling Salesman Problem on High Performance Computing using Message Passing Interface	Izzatdin A Aziz, Universiti Teknologi Petronas, Malaysia Nazleeni Haron, Universiti Teknologi Petronas, Malaysia Mazlina Mehat, Universiti Teknologi Petronas, Malaysia Tang Low, Universiti Teknologi Petronas, Malaysia Aisyah Mustafa, Universiti Teknologi Petronas, Malaysia
Analysing Financial Literacy Determinants with Computational Intelligence Models	Hissam Tawfik, Liverpool Hope University, UK Rentian Huang, Liverpool Hope University, UK Martin Samy, Liverpool Hope University, UK Atulya Nagar, Liverpool Hope University, UK
Agent-Based Modeling Using Swarm Intelligence in Geographical Information Systems	Rawan Ghnemat, Le Harve University, France Cyrille Bertelle, Le Harve University, France

16:00-18:00	
Session ID: IS3 (Web Services III) **Room # 3**	
Chairs: **Imad_Samarah**, (UAE University, UAE); **Nabeel Al-Qirim**, (UAE University, UAE)	
Exploring the Factors of Online Engagement in the Era of Web 2.0: An Experimental Approach	Hend AL-Khalifa, King Saud University, Saudi Arabia
Electronic Customer Relationship Management in VOIP Service	Veronica Buyut, Universiti Teknologi Malaysia, Malaysia Seyed H. Siadat Universiti Teknologi Malaysia, Malaysia
CSOLAP (Continuous Spatial On-Line Analytical Processing)	Taher Ahmed, Claude Bernard University, France
Reconstruction of Normalized XML Documents	Martin Necasky, Charles Uni., Prague, Czech Republic Tomas Knap, Charles Uni., Prague, Czech Republic
Goal support towards Business Processes Modelling	Ananda Edirisuriya, Stockholm University, Sweden
Data Prebuffering using SQL CE Database on Real Time Operation System Windows Mobile 6.0	Ondrej Krejcar, Tech. Uni.of Ostrava, Czech Republic Jindrich Cernohorsky, Tech. Uni.of Ostrava, Czech Republic

19:30
Gala Dinner – Rotana Hotel, Al Ain
Welcome Reception Gala Address Best Student Poster Award

DAY 2

Wednesday 17th December 2008

08:00-10:30

08:00-08:30
Auditorium
Keynote Address - **Mike S. Zafirovski, Nortel**

08:30-10:30	
Session ID: NET4 (Wireless Communications II) **Room # 1**	
Chairs: **Walaa Hamouda** (Concordia University, Canada); **Najah Abu Ali** (UAE University, UAE)	
Small World Wireless Mesh Networks	Nabil Afifi, Curtin University of Technology, Australia Kah Chung, Curtin University of Technology, Australia
Performance Evaluation of the IEEE 802.11e EDCA Access Method	Amal Alahmadi, King Abdulaziz University, Saudi Arabia M. A. Madkour, King Abdulaziz Uni., Saudi Arabia
Uplink Scheduling Mechanism for MPEG Encoded Video in IEEE 802.16 MAN	Subodh Pudasaini, Chosun University, Korea Anup Thapa, Chosun University, Korea Moonsoo Kang, Chosun University, Korea Seokjoo Shin, Chosun University, Korea
QoS Provision in an ad hoc IEEE 802.11 WLAN: A Bayesian War of Attrition Model	Jerzy Konorski, Gdansk University of Technology, Poland
Analysis of Data Packets using Data Stream Management System	Mohammed Qadeer, Aligarh Muslim University, India Nadeem Akhtar, Aligarh Muslim University, India Faraz Khan, Aligarh Muslim University, India Faridul Siddiqui, Aligarh Muslim University, India
Global Index for QoS in Wireless Networks	Mohammed Boulmalf, Al Akhawayn Uni. in Ifrane, Morocco Abderrahmane Lakas, UAE University. UAE Tarik Aouam, Al Akawayn University, Morocco

08:30-10:30	
Session ID: COMP4 (High Performance Computing and Communication Systems) **Room # 2**	
Chairs: **Mousa Hussein**, (UAE University, UAE); **Mohammad Hayajneh**, (UAE University, UAE)	
Parallel Edge Detection on the Multi-core Cell Broadband Engine	Hashir Kidwa, UAE University, UAE Fadi Sibai, UAE University, UAE Tamer Rabie, UAE University, UAE
Experimental Performance Evaluation of a Hybrid Packet Reception Scheme for Linux Networking Subsystem	Khaled Salah, KFUPM, Saudi Arabia
Half-Width Pulse Simulations for Plastic Fiber Optics	Syed Ahamed, City University of New York, USA
Implementation of Pseudo PWM Pulse to Adjust Brightness of LEDs in Video Displays	MohamadHadi Karamiata, Mandegar R&D group, Iran Hosein Zarini Farahmand, Mandegar R&D group, Iran Mohsen Orooji, Mandegar R&D group, Iran Mahboobeh Movafagh, Mandegar R&D group, Iran
Solution of optimal control problems with time-delay	Mohsen Razzaghi, Mississippi State University, USA

08:30-10:30	
Session ID: IS4 (Data Mining I) **Room # 3**	
Chairs: **Shayma Alkobaisi,** (UAE University, UAE); **Fatiha Djebbar**, (UAE University, UAE)	
DRP-DRP: Data Replication Protocol for Disaster Recovery Planning	Arwa Al-Aama, King Abdul Aziz University, Saudi Arabia Hanan Al-Ghamdi King Abdul Aziz University, Saudi Arabia
Improving Availability and Maintaining Consistency of Data in Large Scale Mobile Environments	Ashraf Ahmed, Universiti Teknologi Petronas, Malaysia
A Privacy Preserving Clustering Technique Using Haar Wavelet Transform and Scaling Data Perturbation	Sara Hajian, Iran Uni. of Science and Tech., Iran Mohammad A. Azgomi, Iran Uni. of Science and Tech., Iran
Clustering Massive Categorical Data with Class Association Rules	Abdelaziz Berrado, Al Akhawayn University Ifrane Morocco George Runger, Arizona State University, USA
A Study of Data Anonymization in Privacy Preserving Data Mining	Weijia Yang, Shanghai Jiao Tong University, China
Semantic Interoperability of Dublin Core Metadata in Digital Repositories	Dimitrios Koutsomitropoulos, University of Patras, Greece Georgia Solomou, University of Patras, Greece Theodore Papatheodorou, University of Patras, Greece

08:30-10:30	
Session ID: Workshop 1 (Robotics & Interactive Media) **Room # 5**	
Chair: **Nikolaos Marvidis** (UAE University, UAE)	
Active Media: a Framework for Digital Media Effectiveness	Jamil Alio, De Montfort University, UK Mohammad Ibrahim, De Montfort University, UK David Pickton, De Montfort University, UK Marie Bassford, De Montfort University, UK
A System Architecture of a User-Centered Application for Improving Safety Analysis	Waleed Salem, Uni. of Magdeburg, Germany
Lip Segmentation in Color Images	Reza Rohani, University of Shiraz, Iran Somayeh Alizadeh, University of Shiraz, Iran
Combining Ambient Intelligence and Wireless Sensor Technology for Psycho-physical Embedded Assistance for Senescent Societies	Jawed Siddiqi, Sheffield Hallam University, UK Babak Akhgar, Sheffield Hallam University, UK Fazilatur Rahman, Sheffield Hallam University, UK
Behavioural Realism of Modelling Multi-Agent Communication Protocols in Virtual Environment	Ghada Al-Hudhoud, Al-Ahliya Amman University, Jordan
Usage of real-world robotics in Semantic Web	David Obdrzalek, Charles University, Czech Republic
The FacePrint: A New Representation for 3D Facial Shape	Naoufel Werghi, University of Dubai, UAE
Inner Distance Based Hand Gesture Recognition for Devices Control	Nasibeh Alijanpour, Sahand Uni. of Technology, Iran Hossein Ebrahimnezhad,Sahand Uni. of Technology, Iran Afshin Ebrahimi, Sahand Uni. of Technology, Iran
A Fuzzy Model for Facial Expression Recognition in The E-business	Amir Jamshidnejad, Islamic Azad University, Iran
A New Perspective on the Aesthetic Emotion in Human-Robot Interaction according to the Indian Theory of Rasa	Catalin Buiu, University of Bucharest, Romania

08:30-10:30
Session ID: Tutorial 3 (Security Challenges in Wireless Mesh Networks) **Room # 6**
Speaker: **Dharma P. Agrawal** , University of Cincinnati, USA

10:30-11:00
Coffee Break (Ground floor)

11:00-13:00

11:00-13:00	
Session ID: NET5 (Wireless Communication III) **Room # 1**	
Chair: **Mohamed Boulmalf** (AlAkhawayn Uni. in Ifrane, Morocco)	
Efficient PAPR for OFDM and CI/OFDM Systems with Iterative Clipping	Tomohiro Noguchi, Nara Inst. of Science and Tech., Japan Khoirul Anwar, Nara Inst. of Science and Tech., Japan Masato Saito, Nara Inst. of Science and Tech., Japan Minoru Okada Nara Inst. of Science and Tech., Japan
Impact of Physical Propagation Environment on Ad Hoc Network Routing Protocols	Nuraj Pradhan, City University of New York, USA Tarek Saadawi City University of New York, USA
Bandwidth Management in Mobile Wireless Cellular Networks in Heavy Load Conditions – Time Slot Division Method	Khaja Kamaluddin, College of Applied Sciences, Oman
Capacity Analysis and Power Allocation of MIMO-OFDM System With Statistical Eigen-Beamforming	Hamed Maleki, University of Tehran, Iran Said Nader-Esfahani, University of Tehran, Iran
CDMA versus IDMA for subscriber cell density	Asma Basharat, National Uni. of Sciences and Tech., Pakistan

11:00-13:00	
Session ID: COMP5 (Very Large Scale Integration (VLSI) Design) **Room # 2**	
Chairs: **Abdul-Rahman Al-Ali**, (American Uni. of Sharjah, UAE); **Fadi Sibai**, (UAE University, UAE)	
Designing an MPSoC Architecture with Run-time and Evolvable Task Decomposition and Scheduling: A Neural Network Case Study	Shervin Vakili, University of Tehran, Iran Mehdi Fakhraie, University of Tehran, Iran Siamak Mohammadi, University of Tehran, Iran
Power Efficient Switches with Dynamic Virtual Channel Allocation for Network-on-Chips	Amir-Mohammad R, University of Tehran, Iran Masoud Daneshtalab, University of Tehran, Iran Ali Afzali-Kusha, University of Tehran, Iran Saeed Safari, University of Tehran, Iran
Pico Sensors for All Seasons — When Light Performs Its Marvels	Valeriu Beiu, UAE University, UAE Roxana-Mariana Beiu, University of Bucharest, Romania
A Bayesian Based EDA Tool for Accurate VLSI Reliability Evaluations	Walid Ibrahim, UAE University, UAE
Online and Offline Test Unification in Digital Filters	Rasoul Yousefi, University of Tehran, Iran

11:00-13:00	
Session ID: IS5 (Data Mining II) **Room # 3**	
Chair: **Mamoun Awad**, (UAE University, UAE)	
General and Invariant Image Retrieval from Visual Databases Based on Multiple Search Strategies	Noureddine Abbadeni, Al-Ain Uni. of Sci. & Tech, UAE
A Routing-Aware Middleware-Level Mechanism for Tuple-Based Pervasive Systems	Mohsen Sharifi, Iran Uni. of Sci. & Tech., Iran Shahpour Rahmani, Iran Uni. of Sci. & Tech., Iran Saman Kolahdooz, Iran Uni. of Sci. & Tech., Iran
A Novel technique for data protection in compact discs	M. K. Sheeja, SCT College of Engineering, India
A Systemic Framework for Business Process Modelling and Implementation	Mohammed Salahat, University of Huddersfield, UK Steve Wade, University of Huddersfield, UK John Lu, University of Huddersfield, UK
Fine Grained Access Rights Definition in a Three Tiered Information System	David Bednarek, Charles University in Prague, Czech Republic Jakub Yaghob, Charles University in Prague, Czech Republic Filip Zavoral, Charles University in Prague, Czech Republic
Geospatial Integration: Preparing Building Information Database for Integration with City-GML for Decision Support	Khurram Shahzad, Royal Institute of Technology, Sweden

11:00-13:00	
Session ID: Workshop 2 (Cognitive Science) **Room # 5**	
Chair: **Nikolaos Marvidis** (UAE University, UAE)	
Examining visual attention of dyslexics on web navigation structures with eye tracking	Areej Al-Wabil, City University London, UK Panayiotis Zaphiris, City University London, UK Stephanie Wilson, City University London, UK
Inquiry as away of Teaching Science	Issa Saleh, Emirates Col. for Adv. Education, UAE
Reason as enacted: An opportunity to explore concepts of mind	K. Ibrahim, Emirates Col. for Adv. Education, UAE
One at a time in syntactic theory	Tommi Leung, UAE University, UAE

13:00-14:00
Lunch ((Ground floor)

14:00-16:00

14:00-16:00	
Session ID: NET6 (Wireless Sensor Networks II) **Room # 1**	
Chairs: **Ghassan Kbar** (AUD, UAE); **Farag Sallabi**, (UAE University, UAE)	
Adaptation of the MCDS broadcasting protocol to VANET applications	Lakhdar Oulad djedid, University of Laghouat, Algeria Mohamed Yagoubi, University of Laghouat, Algeria Tahari Abdou el Karim, Universite de Bourgogne, France
Cluster-based MDS Algorithm for Nodes Localization in Wireless Sensor Networks	Biljana Stojkoska, Uni. "Ss Cyril and Methodius", Macedonia
VIE: A Simulator for Road Traffic and Inter-Vehicular Communication	Mariam Al Jaafari, UAE University, UAE Muna Al Shamisi, UAE University, UAE Mariam Al Darmki, UAE University, UAE Mathia Al Kaabi, UAE University, UAE Abderrahmane Lakas, UAE University, UAE Mohammed Boulmalf, AlAkhawayn Uni. In Ifrana, Morocco
Centralized Scheduling, Routing Tree in WiMAX Mesh Networks	Ali Al-Hemyari, Universiti Putra Malaysia, Malaysia

14:00-16:00	
Session ID: IS6 (Research Methods) **Room # 2**	
Chair: **Said Elnaffar**, (UAE University, UAE)	
An Efficient Network Security through an Ontology Approach	Madihah M. Saudi, Universiti Sains Islam Malaysia, Malaysia Azreen Azman, Universiti Sains Islam Malaysia, Malaysia Azni H. A.. Halim, Universiti Sains Islam Malaysia, Malaysia Emran Mohd Tamil, Universiti Sains Islam Malaysia, Malaysia Mohd Y. I. Idris, Universiti Sains Islam Malaysia, Malaysia
Police Operational Planning and Crime Detection through Adopting an Information Systems Approach	Peter Kinloch, Liverpool John Moores University, UK Hulya Francis, Liverpool John Moores University, UK Michael Francis, Liverpool John Moores University, UK Mark Taylor, Liverpool John Moores University, UK
A Markov Model for Multi-Criteria Multi-Person Decision Making	René Chelvier, Otto-von-Guericke-University, Germany Kristina Dammasch, Otto-von-Guericke-University, Germany Graham Horton, Otto-von-Guericke-University, Germany Stefan-Werner Knoll, Otto-von-Guericke-University, Germany Claudia Krull Otto-von-Guericke-University, Germany B. Rauch-Gebbensleben Otto-von-Guericke-Uni., Germany
Bio Inspired Intrusion Prevention and Self-healing Architecture for	Muna Ahmed, Information Technology, Malaysia
The Effect of Using Domain Specific Ontologies in Query Expansion in Medical Field	Vahid Jalali, Amirkabir University of Technology, Iran Mohammad R. M. Borujerdi, Amirkabir Uni. of Tech., Iran
Geospatial Interoperability for IFC and CityGML: Challenges of Existing Building Information Databases	Mohamed El-Mekawy, Royal Institute of Technology, Sweden Anders Östman, University of Gavle, Sweden Khurram Shahzad, Royal Institute of Technology, Sweden

14:00-16:00	
Session ID: SS1 (Realtime Visual Analysis and Visual Communication of In-Vivo and In-Silico Biology) **Room # 3**	
Chair: **Pablo de Heras Ciechomski,** (CEO Visualbiotech, Switzerland)	
Multi-level Classification of Proteins Using 3D Structure Content Representation with Dimensionality Reduction	Kire Trivodaliev, Uni. Ss. Cyril & Methodius, Macedonia Slobodan Kalajdziski Uni. Ss. Cyril & Methodius, Macedonia Danco Davcev Uni. Ss. Cyril & Methodius, Macedonia
seeCell: Visualization and tracking dedicated to cell analysis	Robin Mange, Visualbiotech Switzerland Pablo de Heras Ciechomski, Visualbiotech, Switzerland Melody Swartz, Swiss Federal Inst. of Tech. Switzerland
Two-Phased Real-Time Rendering of Large Neuron Databases	Pablo de Heras Ciechomski, Visualbiotech, Switzerland Robin Mange, Visualbiotech, Switzerland Achille Peternier, Visualbiotech, Switzerland
Management of Medical Images Using Wavelets-Based Multi-Watermarking Algorithm	Tuqa Manasrah, University of Jordan, Jordan Ali Al-Hajj, Princess Sumaya Uni. for Tech., Jordan

14:00-16:00	
Session ID: SS2(Innovations in Arabic Language Technologies) **Room # 4**	
Chair: **Haikal El Abed**, Braunschweig Technical University, Germany)	
An interactive system for Extracting Arabic Lexicon from Arabic Newspaper Text	Mohamed Ben Halima, Uni. of Sfax, Tunisia Adel Alimi, Uni. of Sfax, Tunisia
Arabic (Indian) Handwritten Digits Recognition Using Gabor-based Features	Sabri Mahmoud, KFUPM, Saudi Arabia
A New Lecture support Based on On-line Arabic Handwriting Recognition	Monji Kherallah, REGIM, Tunisia Adel Alimi, REGIM, Tunisia
Arabic Stemming with two dictionaries	Kchaou, Uni. of Sfax, Tunisia Slim Kanoun, ENIS, Tunisia Adel Alimi, REGIM, Tunisia
Arabic Text Recognition Systems - State of the Art and Future Trends	Haikal El Abed (T.U. of Braunschweig, Germany

14:00-16:00
Session ID: Tutorial 4 (Introduction to WAN Planning and Design) **Room # 5**
Speaker: **Algirdas Pakšstas**, London Metropolitan University, UK

14:00-16:00
Session ID: Tutorial 5 (E-learning on the Semantic Web) **Room # 6**
Speaker: **Rachid Benlamri** , Lakehead University, Canada

16:00-16:30
Coffee Break (1st floor)

16:30 – 18:30

16:30-18:30	
Session ID: NET7 (Mobile Networks) **Room # 1**	
Chairs: **Haider Chamas**, (Verizon, USA); **Abderrahmane Lakas**, (UAE University, UAE)	
Wireless Multihop Communication in Sparse Vehicle Ad-Hoc Networks (VANET)	Hiroaki Higaki, Tokyo Denki University, Japan Hiroaki Oka, Tokyo Denki University, Japan
Two Fast Handover Solutions for the IMS Handover in the Presence of Mobile IPv6 by using Context Transfer Procedures	Reza Farahbakhsh, University of Isfahan, Iran Naser Movahhedinia, University of Isfahan, Iran
Design, Implementation, and Evaluation of TAILOR	Hesham Elsayed, UAE University UAE Farhan Siddiqui, Wayne State University, USA Sherali Zeadally, University of the District of Columbia, USA Naveen Chilamkurti, LaTrobe University, Australia
Simulative Study of Error Propagation in Target Tracking Based on Time Synchronization Error in Wireless Sensor Networks	Saeid Pashazadeh, Iran Uni. of Science and Technology, Iran Mohsen Sharifi, Iran Uni. of Science and Technology, Iran
Policy Driven Context-Aware Services in Mobile Environments	Yousif Al Ridhawi, University of Ottawa, Canada Ahmed Karmouch, University of Ottawa, Canada

16:30-18:30	
Session ID: IS7 (Artificial Intelligence) **Room # 2**	
Chair: **Peter Warren**, (UAE University, UAE)	
Using Singular Value Decomposition (SVD) as a solution for search result clustering	Hussam Abdulla, Technical Uni. of Ostrava, Czech Republic Vaclav Snasel, Technical Uni. of Ostrava, Czech Republic
Classification and Identification of Stocks using SOM and Genetic Algorithm based Backpropagation Neural Network.	Asif Khan, RGPV, India
ART Neural Network Based Clustering Method Produces Best Quality Clusters of Fingerprints in Comparison to Self Organizing Map and K-Means Clustering Algorithms	Bhupesh Gour, RGPV, India
Efficient Range Queries in Spatial Peer-to-Peer Networks	Ahmed Saber, University of Sharjah, UAE Zaher Aghbari, University of Sharjah, UAE Ibrahim Kamel, University of Sharjah, UAE
BUXT Engine in Xord: Fragment Buffers for Streaming XSLT Transformations	Jana Dvorakova, Charles Uni. in Prague, Czech Republic Filip Zavoral, Charles Uni. in Prague, Czech Republic
A New Fuzzy System for Supplier Assessment	Mehdi Fasanghari, ITRC, Iran

16:30-18:30	
Session ID: SEC1 (Information and Network Security I) **Room # 3**	
Chairs: Natasa Zivic, (University of Siegen, Germany); **Wassim El-Hajj**, (UAE University, UAE)	
Watermarking Sensor Data for Protecting the Integrity	Hussam Mohammed, University of Sharjah, UAE Ibrahim Kamel, University of Sharjah, UAE Lami Kaya, University of Sharjah, UAE
A Probing Technique for Discovering Last-Matching Rules of a Network Firewall	Khaled Salah, KFUPM, Saudi Arabia
RFID Security Protocols	Hoda Daou, American University of Beirut, Lebanon Ayman Kayssi, American University of Beirut, Lebanon Ali Chehab, American University of Beirut, Lebanon
Hybrid DWT-SVD Video Watermarking	Lama Rajab, University of Jordan, Jordan Tahani Khatib, University of Jordan, Jordan Ali Al-Haj, University of Jordan, Jordan
Digital Image Watermarking using Edge Detection and Wavelets with Robustness Analysis against JPEG Compression Attacks	Senthil Veerasamy, Thiagarajar School of Management, India
Biologically Inspired Architecture for Securing Hybrid Mobile Ad hoc Networks	Yasir abdelgadir, Uni. Technology Petronas, Malaysia Azween B. Abdullah, Uni. Technology Petronas, Malaysia

16:30-18:30
Session ID: Tutorial 6 (Comparative genomics of many closely related species) **Room # 4**
Speaker: **Manolis Kellis** , MIT

DAY 3

Thursday 18th December 2008

08:00-10:30

08:00-08:30
Auditorium
Keynote Address - **Manolis Kellis**

08:30-10:30	
Session ID: SEC2 (Information and Network Security II) **Room # 1**	
Chair: **Ezedin Barka**, (UAE University, UAE)	
Secure Password Detection with Artificial Neural Networks	Fadi Sibai, UAE University, UAE Aaesha Shehhi, UAE University, UAE Sheikha Shehhi, UAE University, UAE Buthaina Shehhi, UAE University, UAE Najlaa Salami, UAE University, UAE
Host Protection in Grid Computing	Batoul Haidar, American University of Beirut, Lebanon Ali Chehab, American University of Beirut, Lebanon Ayman Kayssi, American University of Beirut, Lebanon
Impact of Soft Input Decryption using Feedback on Channel Decoding	Natasa Zivic, University of Siegen, Germany
Performance Evaluation of Simple Fingerprint Minutiae Extraction Algorithm Using Crossing Number on Valley Structure	Sunny Arief Sudiro, Universite de Bourgogne, France Rudi Trisno Yuwono, Gunadarma University, India Lussiana ETP, Gunadarma University, India
Analysis and Its Solution on Security Threats in SIP-based Mobility Support Environments	Byeong-hee Roh, Ajou University, Korea
Auto-Summarization-Based Steganography	Abdelrahman Desoky, University of Maryland, USA Mohamed Younis, University of Maryland, USA Hesham Elsayed, UAE University, UAE

08:30-10:30	
Session ID: IS8 (Semiotics) **Room # 2**	
Chair: **Harmain Harmain**, (UAE University, UAE)	
Constructing Field Association Words Using Declinable Words and Concurrent Words	El-Sayed Atlam, Tokushima University, Japan
Computer Aided Legal Support System: An Initial Framework for Retrieving Legal Cases by Case Base Reasoning Approach	Valliappan Raman, Swinburne Uni. of Tech., Malaysia Ayyappan Palanissamy, Swinburne Uni. of Tech., Malaysia
Building an Effective Rule-Based Light Stemmer for Arabic Language to Improve Search Effectiveness	Mohammad Ababneh, Arab Academy. for Banking and Financial Sciences, Jordan
A Method of Extracting Word Tendencies to Understand Popular Subjects	Kazuhiro Morita, University of Tokushima, Japan Yuya Iwabu, University of Tokushima, Japan El-Sayed Atlam, University of Tokushima, Japan Masao Fuketa, University of Tokushima, Japan Jun-ichi Aoe, University of Tokushima, Japan
@-Palaeography system for ancient Arabic manuscripts	Ikram Moalla, ENIS-University of Sfax, Tunisia
Development of Intelligent User Behavior Based Adaptive Rule Based System	Shruti Kohli, Birla Institute of Technology, India B Joshi, Birla Institute of Technology, India Ela Kumar, Birla Institute of Technology, India

08:30-10:30	
Session ID: IS9 (E-Learning I) **Room # 3**	
Chairs: **Jameela Al-Jaroodi**, (UAE University, UAE)	
A Framework for producing e-learning deliverables from a single source	Dhiya Al-Jumeily, Liverpool John Moores University, UK
Mobile SRS: A Classroom Communication and Assessment Service	Hend AL-Khalifa, King Saud University, Saudi Arabia
Classroom-Laboratory Interaction in an Electronic Engineering Course	Sabina Jeschke, University of Stuttgart, Germany A. Al-Zoubi, Princess Sumaya Uni. for Technology, Jordan Olivier Pfeiffer, Technische Universität Berlin, Germany Nicole Natho, Technische Universität Berlin, Germany Jarir Nsour, Princess Sumaya Uni. for Technology, Jordan
New Paradigm in Evaluating Usability of E-learning System	Navid Nikmehr, Shiraz University, Iran Mahmood Doroodchi, Cardinal Stritch University, USA
Software Quality Ontology for Teaching: A Development Methodology's Issues	Nada Bajnaid, London Metropolitan University, UK Boris Cogan, London Metropolitan University, UK
e-Learning Curiculum Development using Learner Centred Approach	Amal Sabry, Qatar University, Qatar

08:30-10:30
Session ID: Tutorial 7 (Information Technology in the Financial Services Sector) **Room # 5**
Speaker: **Ayman Fathallah** , Callatay & Wouters

10:30-11:00
Coffee Break (Ground floor)

11:00 – 13:00

11:00-13:00	
Session ID: SEC3 (Information and Network Security III) **Room # 1**	
Chairs: **Khaled Salah** (KFUPM, Saudi Arabia); **Issa Khalil** (UAE University, UAE)	
Securing Open Access Networks Using Intelligent Policy Management System	Khaled Shuaib, UAE University, UAE Haidar Chamas, City University of New York, USA
Security Risk Analysis for Asset in relation to Vulnerability, Probability of Threats and Attacks	Ghassan Kbar, American University of Dubai, UAE
Efficient and Secure Buyer-Seller Networking Protocol for Anonymous Digital Transaction	Vinu Das, Saintgits College of Engineering, India
Efficient Placement of Sensors for Detection against Distributed	M Hasan Islam, Centre for Advanced Studies in Eng., Pakistan
Boosting Throughput of Snort NIDS Under Linux	Khaled Salah, KFUPM, Saudi Arabia
A user friendly password authenticated key agreement for web based services	M. Misbahuddin, Centre for Dev. of Adv. Computing, India
Iris Recognition Using Rotational Complex Wavelet Filters: A Novel Approach	Rajesh Bodade, Military College of Telecom. Eng., India

11:00-13:00	
Session ID: IS10 (E-Learning II) **Room # 2**	
Chairs: **Imad Samarah,** (UAE University); **Leila Ismail**, (UAE University, UAE)	
Knowledge, Opportunities and Information Ethics	Syed Ahamed, City University of New York, USA
Use of Ontologies for Bridging Semantic Gaps in Distant Communication	Fumio Hattori, Ritsumeikan University, Japan Nilar Aye, Ritsumeikan University, Japan Kazuhiro Kuwabara, Ritsumeikan University, Japan
A Study on Management of Software Engineering in Japanese Enterprise IT Industry	Yasuo Kadono, Tokyo University of Technology, Japan
Effect of Online Discussion Forums to Improve Mathematics Problem Solving and Critical Thinking –A Comparative Study	Seibu Jacob, Swinburne University of Tech., Malaysia Hong Sam, Swinburne University of Tech., Malaysia
A methodology for building Simulation-based e-Learning environments for Scrum	Imran Zualkernan, American University of Sharjah, UAE Hanan Al Darmaki, American University of Sharjah, UAE Maha Shouman, American University of Sharjah, UAE

11:00-13:00	
Session ID: IS11 (E-Government) **Room # 3**	
Chairs**: Nabeel Alqirim** , (UAE University, UAE); **Nader Kesserwan**, (UAE University, UAE)	
Electronic Government Issues and Implications	Nabeel Alqirim, UAE University, UAE
A Human Resource Management System developed using the Cellular Data System	Toshio Kodama, Advanced Computer Systems, Japan
Electronic Government in the Emirate of Dubai in the United Arab Emirates	Nabeel Alqirim, UAE University, UAE
CAPSC: A Context-Aware Payment System for Supply-Chains	Mehdi Shajari, Amirkabir University of Technology, Iran

13:00-14:00
Lunch and Closing Ceremony (Ground floor)

14:00
Social Programs (Dubai City Tour and Dhow Cruise/ Desert Safari)