



## The 4th International Conference on Innovations in Information Technology

<http://www.it-innovations.ae>

November 18 – 20, 2007  
Madinat Jumeirah, Dubai, United Arab Emirates

### CONFERENCE PROGRAM

#### SUNDAY, NOVEMBER 18, 2007 (Joharah Ballroom)

08:00 - 10:00:	<b>Registration</b>
10:00 - 10:30:	<b>Opening ceremony</b>
10:30 - 10:50:	<b>Keynotes:</b> Keynote 1: Dr Atta-Ur-Rahman, Federal Minister, Higher Education Commission, Pakistan Keynote 2: Mr. Rama Raju, Co-founder/CEO, Satyam, India Keynote 3: Dr. Thomas Andersson, President, Jönköping University, Sweden
11:30 - 11:45:	<b>Coffee Break</b>
11:45 - 12:40:	<b>Humanoid Robotics Session:</b> Is it human or is it a robot Dr. Nikolaos Mavridis, Interactive Robots and Media Lab, Director, UAE University, UAE Dr. David Hanson, Founder/Chief Scientist, Hanson Robotics, USA Dr. Hiroshi Ishiguro, Intelligent Robotics Lab., Director, Osaka University, Japan Dr. Jun Ho Oh, Director, Humanoids Laboratory, Korean Institute of Technology, Korea
12:40 - 14:00:	<b>Lunch</b> (sponsored by Innovations'07)

11:30 - 15:30:	<b>Johara I</b> Student Posters Session
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## SUNDAY, NOVEMBER 18, 2007

<b>14:00 - 15:40</b>
<b>Joharah: VIP Session</b>
Mr. Mike Carr, Director Research & Venturing British Telecom, UK
Mr. Michael D. King, Director, Global Education Industry, IBM Corporation, USA
Mr. Aseem Gupta, CEO, Visionaire, UAE
Dr. Tarek Al Abbady, Director, Microsoft Research & Innovation Centre, Cairo, Egypt
Mr. Thiru P. Reddy, Vice President Business Development, Strand Lift Sciences, India
Dr. Sai Subramaniam, Sr. Vice President Solutions, Strand Lift Sciences, India

<b>Session IB: Data Mining</b>	
Dynamic index selection in data warehouses	Stéphane Azefack, University of Lyon, France Kamel Aouiche, University of Quebec at Montreal, Canada Jérôme Darmont, University of Lyon, France
Designing a Well-Structured E-Shop Using Association Rule Mining	Asem Omari, University Düsseldorf, Germany Stefan Conrad, University Düsseldorf, Germany Sadet Alci, University Düsseldorf, Germany
The Development of an Objective Metric for the Accessibility Dimension of Data Quality	Owen Foley, Dublin City University, Ireland Markus Helfert, Dublin City University, Ireland
Web Page Analysis: Experiments Based on Web Patterns	Karel Klos, VSB - TU Ostrava, Czech Republic Jana Kocibova, VSB - TU Ostrava, Czech Republic Ondrej Lehecka, VSB - TU Ostrava, Czech Republic Milos Kudelka, VSB - TU Ostrava, Czech Republic Vaclav Snael, VSB-TU of Ostrava, Czech Republic Hana Rezankova, University of Economics, Czech Republic
An efficient decision tree construction for large datasets	Nguyen Thi Van Uyen, Kyung Hee University, Korea Tae Choong Chung, Kyung Hee University, Korea

<b>Session IC: Business and Process Management</b>	
Collaboration as a Reusable Component in Business Process Management	John Shepherdson, British Telecommunications Plc., UK Nader Azarmi, British Telecommunications Plc., UK Habin Lee, Brunel University, UK Hyung Jun Ahn, Waikato University, Japan
An Advanced Planning and Scheduling Platform for Service Enterprise	Raphael Dorne, British Telecom, UK Chris Voudouris, British Telecom, UK Gilbert Owusu, British Telecom, UK
Metrics for Evaluating Enterprise Systems' Architecture	Khalid Khawaja, American University in Dubai, UAE
Defining the Input Specifications for the Partitioning of Automobiles E/E Systems within a Model-Driven Development Scheme	Augustin Kebemou, Fraunhofer Institute for Software and Systems Engineering, Germany Ina Schieferdecker, Fraunhofer Institute for Open Communications Systems, Germany
A Formal Model for e-Healthcare Readiness Assessment in a Developing Country Context	Ojo S.O., University of Botswana Olugbara O.O., University of Zululand, South Africa George Ditsa, UAE University, UAE Adigun M. O., Xulu S.S., University of Zululand, South Africa

<b>Session ID: Wireless Communications I</b>	
Robustness Assessment of Intelligent Information Fusion Techniques in Navigation Systems Encountering Satellite Outage	Ali Asadian, University of Tehran, Iran Behzad Moshiri, University of Tehran, Iran Javad Rezaie, University of Tehran, Iran
Spectrum Allocation Algorithms for Uplink Sub-carriers in OFDMA-Based Cognitive Radio Networks	Tae-Hwan Kim, Sungkyunkwan University, Korea Tae-Jin Lee, Sungkyunkwan University, Korea
Simulation of adaptive antenna for interference reduction	Rajab Legnain, University of Garyounis, Libya Abdelsalam Ambarek, University of Garyounis, Libya
Channel Allocation to Reduce Co-channel Interference in Multi-cell Cognitive Radio Networks	Seung Su Han, Sungkyunkwan University, Korea Tae-Jin Lee, Sungkyunkwan University, Korea
Resource Allocation and Game Theoretic Scheduling in IEEE 802.16 Fixed Broadband Wireless Access Systems	Jayaparvathy.R, Coimbatore Institute of Technology, India S.Geetha, Coimbatore Institute of Technology, India

## 15:40 - 16:00 Coffee Break

**16:00 - 17:40 (SUNDAY, NOVEMBER 18, 2007)**

<b>Session 2A: Multimedia Communications</b>	
Data Taxonomy Procedure of Streaming Output of a Digital Video Broadcast via Satellite Receiver	I Made Murwantara, Universitas Pelita Harapan, Indonesia Arnold Aribowo, Universitas Pelita Harapan, Indonesia Pujianto Yugopuspito, Universitas Pelita Harapan, Indonesia
Multi-path Scheduling Algorithm for Real-Time Video Applications in Next-Generation Wireless Networks	Fernandez Juan Carlos, University of Tohoku, Japan Tarik Taleb, University of Tohoku, Japan Yushiaki Nemoto, University of Tohoku, Japan Nei Kato, University of Tohoku, Japan
Multimedia Processing in Wireless Sensor Networks	Hakan Oztarak, Middle East Technical University, Turkey Adnan Yazici, Middle East Technical University, Turkey Demet Aksoy, University of California Davis, USA Roy George, Clark Atlanta University, USA
Mobile Multiprotocol Label Switching	Sadia Ashraf, NUST, Pakistan Shoab A. Khan, NUST, Pakistan Naveed S. Khattak, NUST, Pakistan Abdur Rehman, NUST, Pakistan

<b>Session 2B: Computer &amp; Network Security I</b>	
Access Control in e-Health Portal Systems	Shuo Lu, Concordia University, Canada Yuan Hong, Concordia University, Canada Qian Liu, Concordia University, Canada Lingyu Wang, Concordia University, Canada Rachida Dssouli, Concordia University, Canada
Towards a better applicability of public key certificates	Safuat Hamdy, UAE University, UAE
Securing the Wireless LANs that is based on Distributed Resource Management against internal attacks	Ghassan Kbar, American University of Dubai, UAE Wathiq Mansoor, American University of Dubai, UAE

Copyright Protection in Overlay Multicast Communication	Emad Eldin Mohamed, UAE University, UAE
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## Session 2C: Ad Hoc and Sensor Networks I

Improving Directional Rumor Routing in Wireless Sensor Networks	Hamid Shokrzadeh, Islamic Azad University, Iran M. Mashaieki, Research Institute of Petroleum Industry, Iran A. Nayebi, Research Institute of Petroleum Industry, Iran
On The Performance Of Directed Diffusion In Dense Sensor Networks	Lyes Khelladi, CERIST Center of Research Nadjib Badache, USTHB university, LSI Lab
Power Saving Deviation and Sudden Demise Effect of Cluster Head (CH) in the WEAC Protocol	Hafiz M. Asif, COMSATS Institute of Information Technology, Pakistan Tarek R. Sheltami, King Fahd University of Petroleum & Minerals, Saudi Arabia
Functional Testing of Wireless Sensor Node Designs	Kashif Munir Virk, Technical University of Denmark, Denmark Jan Madsen, Technical University of Denmark, Denmark
Simulation of Mobile Ad hoc Routing Strategies	Ahmed Boukhalkhal, University of Laghouat, Algeria M. B. Yagoubi, University of Laghouat, Algeria M. Djoudi, University of Constantine, Algeria Ouinten Youcef, University of Laghouat, Algeria Mohamed Benmohammed, University of Constantine, Algeria

## Session 2D: E-Learning & E-Society

The Implementation of a Web-based 3D Multimedia Learning Prototype in Biology subject: BioID	Amirrudin Kamsin, University of Malaya, Malaysia Cha Gek Teng, University of Malaya, Malaysia Tay Lee Kee, University of Malaya, Malaysia
KEA - a Mathematical Knowledge Management System combining Web 2.0 with Semantic Web Technologies	Sabina Jeschke, University of Stuttgart, Germany Marc Wilke, University of Stuttgart, Germany Nicole Natho, TU Berlin, Germany Olivier Pfeiffer, TU Berlin, Germany
Operating System Virtualization to Support E-learning with Affective Intelligent Tutoring Systems	Chris Messom, Massey University, New Zealand Abdolhossein Sarrafzadeh, Massey University, New Zealand Anton Gerdelan, Massey University, New Zealand Martin Johnson, Massey University, New Zealand Jamshid Shanbehzadeh, Tarbiat Moalem University, Iran
Building Intelligent Web-based System for Efficient Tracking Learner's Communication Activities on Discussion Forums	Madeth May, National Institute of Applied Sciences of Lyon, France Sébastien George, National Institute of Applied Sciences of Lyon, France Patrick Prévôt, National Institute of Applied Sciences of Lyon, France

**20:00 - 22:00: (SUNDAY, NOVEMBER 18, 2007)**

**Gala Dinner**

Keynote Speakers:

(1) Dr. John Bowers, CTO Calient Networks, California, USA ;

(2) Mr. Roberto Saracco, IEEE USA and Telecom Italia ;

Cisco Research Excellence Award;

Best Student Poster Award

Distinguished Scholar Award;

## MONDAY, NOVEMBER 19, 2007

**09:00 - 10:40**

**Session 3A: Computer & Network Security II**

Implementation of the automated network vulnerability assessment	Jun Yoon, Korea Information Security Agency, Korea Won Tae Sim, Korea Information Security Agency, Korea
Bottleneck Analysis of Traffic Monitoring using Wireshark	Abes Dabir, Carleton University, Canada Ashraf Matrawy, Carleton University, Canada
XML based open tool for anomalies detection in firewall filtering rules	Mohammed Anis Benelbahri, High School of Telecommunication, Tunisia Adel Bouhoula, College of Telecommunications, Tunisia Zouheir Trabelsi, UAE University, UAE
Enabling Access Control and Privacy through Ontology	Mohammad M. R. Chowdhury, UniK-University Graduate Center, Kjeller, Norway Josef Noll, UniK-University Graduate Center, Kjeller, Norway Juan Miguel Gomez, Universidad Carlos III de Madrid, Spain

**Session 3B: Fuzzy Computing & Neural Networks**

Using a Combination of Model Based and Intelligent methods in Automatic Landmark Detection in Cephalometry	Rahele Kafieh, Isfahan University of Medicine, Iran Saeed Sadri, Isfahan University of Technology, Iran Alireza Mehri, Isfahan University of Medicine, Iran Hamid Raji, Isfahan University of Medicine, Iran
Comparing Two Models for Word Boundary Detection in a Phoneme Sequence Using Recurrent Fuzzy Neural Networks	Mohammad Reza Feizi Derakhshi, University of Science and Technology, Iran Mohammad Reza Kangavari, University of Science and Technology, Iran Elnaz Zafarani Moattar, Islamic Azad University Mahdi Aliyari Shorehdeli, K. N. Toosi University of Technology, Iran
The Kalman Filter Information Fusion for Cement Mill Control Based on Local Linear Neuro-Fuzzy Model	Amin Ramezani, University of Tehran, Iran Hamed Ramezani, University of Tehran, Iran Behzad Moshiri, University of Tehran, Iran
Handwritten Character Recognition using Perceptual Fuzzy-Zoning and Class Modular Neural Networks	Lajish V L, Tata Consultancy Services, India

<b>Session 3C: Web Applications I</b>	
Reverse Engineering of Web Based Systems	Abdelwahab Hamou-Lhadj, Concordia University, Canada Abdeslam En-Nouaary, Concordia University, Canada Khalid Sultan, Concordia University, Canada
Capturing Forms in Web Information Systems	Hui Ma, Massey University, New Zealand Rene Noack, University of Kiel, Germany Faizal Riaz-ud-Din, Massey University, New Zealand Klaus-Dieter Schewe, Massey University, New Zealand Bernhard Thalheim, University of Kiel, Germany
A Keyword Searching Algorithm For Search Engines	Vishal Gupta, Institute of Management Studies, India
CoolRank: A Social Solution for Ranking Bookmarked Web Resources	Hend Al-Khalifa, King Saud University, Saudi Arabi
Evolution of Interdependency model based on behavioral analysis of User, Search Engine and Advertiser in Online Advertising	Shruti Kohli, Birla Institute of Technology, India Ela Kumar, YMCA Institute of Engineering, Faridabad, India

<b>Session 3D: Pervasive Computing I</b>	
Power Line Communications: An Overview of Applications, Technology and the HomePlug Standards	Muhammad Salman Yousuf, King Fahd University of Petroleum and Minerals, Saudi Arabia Mustafa El-Shafei, King Fahd University of Petroleum and Minerals, Saudi Arabia
Innovative technologies for the creative industries: Advanced human-machine interfaces for dynamic performance effects	Abdolhossein Sarrafzadeh, Massey University, New Zealand Jamshid Shanbehzadeh, Tarbiat Moalem University, Iran Chris Messom, Massey University, New Zealand Martin Johnson, Massey University, New Zealand
A Hybrid Framework to Program Smart Environments	Aiman Erbad, University of British Columbia, Canada Charles Krasic, University of British Columbia, Canada
The Flexible Service Composition Framework for Networked Appliances	Chatchawin Namman, King Mongkut's Institute of Technology North Bangkok, Thailand Anirach Mingkhwan, King Mongkut's Institute of Technology North Bangkok, Thailand Omar Abuelma'atti, Liverpool John Moores University, UK Madjid Merabti, Liverpool John Moores University, UK
Knowledge Cities: The Future of Cities in the Knowledge-based Economy	Kostas Ergazakis, National Technical University of Athens, Greece Kostas Metaxiotis, Greek Ministry of Economy and Finance, Greece Emmanouil Ergazakis, National Technical University of Athens, Greece John Psarras, National Technical University of Athens, Greece

<b>Morjaan I: Tutorial I.a</b>	
RFID Technology: A methodology of evaluating its impact through modeling and simulation	Samuel Fosso Wamba, Polytechnic School of Montreal, Canada

<b>Morjaan 2: Tutorial 2.a</b>	
Developing wireless products in the industrial, Scientific & Medical (ISM) Band, The Next Big Thing: The case of Zigbee Standard.	Iboun Taimiya Sylla, Texas Instruments Inc, USA

<b>10:40 - 11:00</b>	<b>Coffee Break</b>
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<b>11:00 - 12:40 (MONDAY, NOVEMBER 19, 2007)</b>
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<b>Session 4A: Genetic Algorithms</b>	
Similarity of XML Schema Fragments Based on XML Data Statistics	Irena Mlynkova, Charles University, Czech Republic Jaroslav Pokorny, Charles University, Czech Republic
Job Scheduling in Multi Processor Architecture Using Genetic Algorithm	Elnaz Zafarani Moattar, Islamic Azad University, Iran Amir M. Rahmani, Islamic Azad University, Iran Mohammad Reza Feizi Derakhshi, University of Science and Technology, Iran
An Evolutionary Approach for Partitioning Weighted Module Dependency Graphs	Ali Asghar Pourhaji Kazem, University of Tabriz, Iran Shahriar Lotfi, University of Tabriz, Iran
An Evolutionary Data Mining Model for Fuzzy Concept Extraction	Mohammad Amin Riji, University of Mashhad, Iran Milani Fard, Ferdowsi, University of Mashhad, Iran Mohammad R. Akbarzadeh, University of Mashhad, Iran
HGGASA: An Annealing Grouping Genetic Algorithm for Finding Feasible Timetables	Amir Najafi-Ardabili, University of Ferdowsi, Iran Danial Qarouni-Fard, University of Ferdowsi, Iran Mohamad-Reza Andalibizadeh, Shahid Beheshti University, Iran Ooldooz Ghorbani, Ferdowsi University, Iran Mohammad Sadegh Sheikhaei, Amirkabir University of Technology, Iran Javad Mohammadzadeh, University of Tehran, Iran

<b>Session 4B: Wireless Communications II</b>	
Designing High Available Satellite Ground Stations	Kayvan Farzaneh, ITRC, Iran Leila Mohammady, ITRC, Iran Azam Eidi, ITRC, Iran
The Performance of a Diversity-based MC-CDMA in the Presence of Frequency Offset and Inter-Carrier Interferences	Mohamed E. Khedr, Arab Academy for Science and Technology, Egypt Mohamed M. Ramadan, Arab Academy for Science and Technology, Egypt
Efficient Utilization of Orthogonal Variable Spreading Factor Trees Using Two levels Of Hierarchies and Adaptive Rate Control Mechanism	Mohamed E. Khedr, Arab Academy for Science and Technology, Egypt Roshdy A. AbdelRasoul, Arab Academy for Science and Technology, Egypt Mahmoud M. Youssef, Nilesat, Cairo, Egypt
CHASS-M: Channel Assignment for Fair Payoff Based on Game Theory for Wireless Multi-hop Networks	Hyun-Ki Kim, Sungkyunkwan University, Korea Tae-Jin Lee, Sungkyunkwan University, Korea

<b>Session 4C: Computing Systems</b>	
Reconfigurable and Area-Efficient Architecture for Symmetric FIR Filters with Powers-of-Two Coefficients	Dongwon Lee, Samsung Electronics, Korea
Performance Effect of Localized Thread Schedules in Heterogeneous Multi-Core Processors	Fadi Sibai, UAE University, UAE
On Making Intelligence Performance-Inconspicuous in 3D Games	Fadi Sibai, UAE University, UAE
Using Text-to-Speech Engine to Improve the Accuracy of a Speech-Enabled Interface	Yacine Benahmed, University of Moncton, Canada Sid-Ahmed Selouani, University of Moncton, Canada Habib Hamam, University of Moncton, Canada Douglas O'Shaughnessy, INRS-EMT Telecommunication, Canada
The Implementation of a Persistent Type-Safe Object-Oriented Programming Language	Omar M. Sallabi

<b>Session 4D: Special Session: IT Applications in Electric Power Systems I</b>	
Power Systems Monitoring & Control Centers Sharing SCADA/EMS Information in the Age of Enterprise Mobility.	Alaa Maghiub, TRANSCO Najeeb Dandachi, TRANSCO
High Voltage Circuit Breaker Modeling for Online Model-Based Monitoring and Diagnosis.	H. H. Zeineldin, University of Waterloo, Canada E. F. El-Saadany, University of Waterloo, Canada M. M. A. Salama, University of Waterloo, Canada Z. Wang, ABB Corporate Research, Canada Yasser Mohamed, University of Waterloo, Canada
Virtual SCADA Simulation System for Power Substation	Khalid Darwish, American University of Sharjah, UAE A. R. Al-Ali, American University of Sharjah, UAE Rached Dhaouadi, American University of Sharjah, UAE
An Intelligent-Based Technique for Locating Switched Capacitors in the Distribution Systems Using High Frequency	Ahmed Abu-Elanien, University of Waterloo, Canada M. M. A. Salama, University of Waterloo, Canada
PC-Based SCADA Simulator for Distribution System Analysis	Mohamed Awad, UAE Awad I. Ibrahim, UAE

<b>Morjaan 1: Tutorial 1.b</b>	
RFID Technology: A methodology of evaluating its impact through modeling and simulation	Samuel Fosso Wamba, Polytechnic School of Montreal, Canada

<b>Morjaan 2: Tutorial 2.b</b>	
Developing wireless products in the industrial, Scientific & Medical (ISM) Band, The Next Big Thing: The case of Zigbee Standard.	Iboun Taimiya Sylla, Texas Instruments Inc, USA

**12:40 - 14:00: Lunch Break**



<b>14:00 - 15:40 (MONDAY, NOVEMBER 19, 2007)</b>	
<b>Session 5A: Embedded &amp; Real-Time Systems</b>	
Live Range Splitting at Recursive Function Calls	Stefan Schaeckeler, Santa Clara University, USA Weijia Shang, Santa Clara University, USA
Evaluation of I-Cache Locking Technique for Real-Time Embedded Systems	Abu Asaduzzaman, Florida Atlantic University, USA Niranjan Limbachiya, Florida Atlantic University, USA Imad Mahgoub, Florida Atlantic University, USA Fadi Sibai, UAE University, UAE
Minimizing Response Time Implication in DVS Scheduling for Low Power Real-Time Embedded Systems	Nasaro Min-Allah, Chinese Academy of Sciences, China Asad-Raza Kazmi, Chinese Academy of Sciences, China Ishtiaq Ali, COMSATS University, Pakistan Xing Jian-Sheng, Graduate School, CAS, China Wang Yong-Ji, Chinese Academy of Sciences, China
EVO-EXPLORER: A Tool for Designing High-Performance Digital Systems	Azeddine Sllame, Al Fateh University, Libya
Online Feasibility Analysis with Composite-Deadline	Nasaro Min-Allah, Chinese Academy of Sciences, China Imran Ali, Chinese Academy of Sciences, China Xing Jian-Sheng, Chinese Academy of Sciences, China Wang Yong-Ji, Chinese Academy of Sciences, China

<b>Session 5B: Ad Hoc and Sensor Networks II</b>	
Admission Control Scheme and Bandwidth Management Protocol for 802.11 Ad hoc Networks	Abdelouahid Derhab, CERIST Research Center, Algeria Abdelmajid Bouabdallah, Heudiasyc-UMR CNRS, France
Supporting Data-Intensive Wireless Sensor Applications using Smart Data Fragmentation and Buffer Management	Mbonisi Masilela, Virginia Commonwealth University, USA Ju Wang, Virginia Commonwealth University, USA Ramana Pidaparti, Virginia Commonwealth University, USA
A Functional Component Based Framework for Cross-Layer Design	Mike Slavik, Florida Atlantic University, USA Imad Mahgoub, Florida Atlantic University, USA Ahmed Badi, Florida Atlantic University, USA Fadi Sibai, UAE University, UAE
An Adaptive Clustering Algorithm with Power Control in Wireless Sensor Networks	Hye-Sun Hur, Chungnam National University, Korea Kyungsup Kim, Chungnam National University, Korea

<b>Session 5C: Algorithms &amp; Heuristics</b>	
Wave-Fronts Parallelization and Scheduling	Saeed Parsa, Iran University of Science and Technology, Iran Shahriar Lotfi, Iran University of Science and Technology, Iran
Finding Feasible Timetables with Particle Swarm Optimization	Danial Qarouni-Fard, University of Ferdowsi, Iran Amir Najafi-Ardabili, University of Ferdowsi, Iran M- hossein Moeinzadeh, University of Tehran, Iran Sarah Sharifian Razavi, Ferdowsi University of Mashhad, Iran Ehsan Asgarian, Sharif University of Technology, Iran Javad Mohammadzadeh, University of Tehran, Iran

Behavior of the Concept Lattice Reduction to visualizing data after Using Matrix Decompositions	Vaclav Snasel, VSB-Technical University of Ostrava, Czech Republic Hussam M. Dahwa Abdulla, VSB Technical University Ostrava, Czech Republic Martin Polovincak, VSB Technical University Ostrava, Czech Republic
Solving MEC and MEC/GI Problem Models Using Information Fusion and Multiple Classifier Systems	Ehsan Asgarian, Sharif University of Technology, Iran M- hossein Moeinzadeh, University of Tehran, Iran Javad Mohammadzadeh, University of Tehran, Iran Ali Ghazinezhad, Ferdowsi University of Mashhad, Iran Jafar Habibi, Sharif University of Technology, Iran Amir Najafi- Ardabili, University of Ferdowsi, Iran
Three Heuristic Clustering Methods for Haplotype Reconstruction Problem with Genotype Information	M- hossein Moeinzadeh, University of Tehran, Iran Ehsan Asgarian, Sharif University of Technology, Iran Amir Najafi- Ardabili, University of Ferdowsi, Iran Sarah Sharifian Razavi, Ferdowsi University of Mashhad, Iran Javad Mohammadzadeh, University of Tehran, Iran Mohammad-Sadegh Shaikhaei, Amirkabir University of Technology, Iran

## Session 5D: Special Session: IT Applications in Electric Power Systems II

System of Support of Decision-Making for Electrical Power System Staff.	Diaeldin Ali Ibrahim, University of Donetsk, Ukraine I. P. Zabolotny, Donetsk State Technical University, Ukraine
Substation Automation Techniques and Future Trends	A B S Mohamed Rayees, Al Ain Distribution Company, UAE
Autonomic Computing Application in Power System Distributions.	M AL Zawi, Liverpool John Moores University, UK D. Al-Jumeily, Liverpool John Moores University, UK Abir Jaafar Hussain, Liverpool John Moores University, UK T. F. Abdelsalam, University of Bath, UK
An Efficient Tri-loop Controller for Photovoltaic Powered Four-wheel Electric Vehicle.	Emhemed Elbakush, University of New Brunswick, Canada A.M. Sharaf, University of New Brunswick, Canada I. H. Altas, Karadeniz Technical University, Trabzon, Turkey
A New Digital Signal Processing Based Approach for Evaluation of Reactive Power and Energy in Power Distribution Systems.	Adalet Abiyev, Girne American University, Turkey

## Morjaan I: Mobility Management

IEEE 802.21 MIH based Handover for Next Generation Mobile Communication Systems	Jae-Han Seol, Yonsei University, Korea Jong-Moon Chung, Yonsei University, Korea
A Decision Scheme for Vertical Handoff in Overlay Wireless Networks	Rami Tawil, Pierre et Marie Curie University, France Guy Pujolle, Pierre et Marie Curie University, France Oscar Salazar, Telecom Paris (ENST), France Jacques Demerjian, PhdGroup.org Association, France

<p>A Cross-Layer Vertical Handover Decision Model for Heterogeneous Wireless Networks</p>	<p>Syed Zubair Ahmad, Mohammad Ali Jinnah University, Pakistan                  Mohammad Saeed Akbar, Mohammad Ali Jinnah University, Pakistan                  Mohammad Abdul Kadir, Mohammad Ali Jinnah University, Pakistan</p>
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<p><b>Morjaan 2: Tutorial 3.a</b></p>	
<p>Basics of Portal Technologies Using Open source and Commercial Products.</p>	<p>Dr. Khalid Khawaja, American University in Dubai, UAE</p>

**15:40 - 16:00 Coffee Break**

**16:00 - 17:40 (MONDAY, NOVEMBER 19, 2007)**

<p><b>Session 6A: Natural Language Processing</b></p>	
<p>Stemming Versus Light Stemming as Feature Selection Techniques for Arabic Text Categorization</p>	<p>Rehab Duwairi, Jordan University of Science and Technology, Jordan                  Mohammad Al-Refai, Jordan University of Science and Technology, Jordan                  Natheer Khasawneh, Jordan University of Science and Technology, Jordan</p>
<p>Investigating Automatic Recognition of Non-Native Arabic Speech</p>	<p>Sid-Ahmed Selouani, University of Moncton, Canada                  Yousef Alotaibi, King Saud University, Saudi Arabia</p>
<p>Stemmer Algorithm for Arabic Words based on excessive letter locations</p>	<p>Riyad Al Shalabi, Arab Academy for Banking and Financial Sciences, Jordan                  Ghassan Kanaan, Arab Academy for Banking and Financial Sciences, Jordan                  Sameh Ghawanmeh, Yarmouk University, Jordan</p>
<p>Enhanced Arabic Information Retrieval System based on Arabic Text Classification</p>	<p>Sameh Ghawanmeh, Yarmouk University, Jordan                  Ghassan Kanaan, Arab Academy for Banking and Financial Sciences, Jordan                  Riyad Al Shalabi, Arab Academy for Banking and Financial Sciences, Jordan                  Ahmad Ababneh, Yarmouk University, Jordan</p>
<p>A Comparison between Interactive and Automatic Query Expansion Applied on Arabic Language</p>	<p>Ghassan Kanaan, Arab Academy for Banking and Financial Sciences, Jordan                  Riyad Al Shalabi, Arab Academy for Banking and Financial Sciences, Jordan                  Sameh Ghawanmeh, Yarmouk University, Jordan                  Basel bani-Ismael, Yarmouk University, Jordan</p>

**Session 6B: Pattern Matching and Recognition**

<p>Tool Support for Composition and Verification of Formal Behaviors</p>	<p>Siamak Kolahi, Concordia University, Canada                  Aziz Salah, University of Quebec at Montreal, Canada                  Rabeb Mizouni, Concordia University, Canada                  Rachida Dssouli, Concordia University, Canada</p>
<p>Face Recognition Using State Space Parameters and K-NN Classifier</p>	<p>Kabeer V, Kannur University, India                  T M Thasleema, Kannur University, India</p>

	N K Narayanan, Kannur University, India
Identification of lung cancer based on shape and color	Fatma Taher, University of Sharjah, UAE Rachid Sammouda, University of Sharjah, UAE
License Plate Localization in ALPR Systems	Hasan R. Obeid, Hariri Canadian University, Lebanon Rached N. Zantout, Hariri Canadian University, Lebanon Fadi Sibai, UAE University, UAE
A Prerequisite Concepts for Temporal-Side Sequential Patterns Discovery	Ahmed Aburodes Assaid, Sebha University, Libya

<b>Session 6C: Agent-Based Systems</b>	
A Framework for the Evaluation of Agent-Oriented Methodologies	T. Abdelaziz, University of Duisburg-Essen, Essen, Germany Mohamed Elammari, University of Garyounis, Libya R. Unland, University of Duisburg-Essen, Essen, Germany
Agent-Based Approach for Designing and Implementing a Virtual Laboratory	Djamila Mechta, University Ferhat Abbes of Setif Algeria Saad Harous, University of Sharjah, UAE Mahieddine Djoudi, University of Poitiers, France Amel Douar, University Ferhat Abbes of Setif, Algeria
Pattern-Based Design for Intelligent Mobile Agents	Ananta Charan Ojha, ICFAI University, India Sateesh Kumar Pradhan, Utkal University, India Manas Ranjan Patra, Berhampur University, India
Complexity Results for Argumentation-based Agent Communication	Jamal Bentahar, Concordia University, Canada Zakaria Maamar, Zayed University, UAE
An Approach Towards Emotion Estimation During Chat Sessions Using Software Agents	Abu Zafar Abbasi, National University of Computer and Emerging Sciences, Karachi, Pakistan Dr. Zubair A. Shaikh, National University of Computer and Emerging Sciences, Karachi, Pakistan

<b>Session 6D: Special Session: Innovations in Simulation Techniques</b>	
A Financial Literacy Simulation Model using Neural Networks	Rentian Huang, Liverpool Hope University, UK H. Tawfik, Liverpool Hope University, UK M. Samy, Liverpool Hope University, UK A. K. Nagar, Liverpool Hope University, UK
Use Cases and Scenarios Engineering	Abdesslam Jakimi, ENSIAS, Morocco Ayoub Sabraoui, ENSIAS, Morocco Elarbi Badi, UAE University, UAE Ali Idri, ENSIAS, Morocco Mohamed Elkoutbi, ENSIAS, University MohammedV, Morocco
A Simulation Model for Large Scale Distributed Systems	Ciprian M. Dobre, Politechnica University of Bucharest, Romania Valentin Cristea, Politehnica University of Bucharest, Romania
Novel Approach in Modeling the Extents of Moving Objects	Haoran Chen, University of Science and Technology of China Jin Peiquan, University of Science and Technology of China Yue Lihua, University of Science and Technology of China

Development of a Virtual Memory Simulator to Analyze the Goodness of Page Replacement Algorithms	Fadi Sibai, UAE University, UAE Maria Ma, Fidelity Investments, USA David A. Lill, Motorola, Inc., USA
Active Tokens for Modelling Mental Health Care with Coloured Stochastic Petri Nets	Kristina Dammasch, University of Magdeburg, Germany Graham Horton, University of Magdeburg, Germany
An Interactive Web Based Decision Support System for Financial Decisions within a Team	George Rigopoulos, National Technical University of Athens, Greece Alessandra Orsoni, Kingston University, UK Javier Otamendi, Universidad Rey Juan Carlos, Spain

<b>Morjaan 2:</b>	<b>Tutorial 3.b</b>
Basics of Portal Technologies Using Open source and Commercial Products.	Dr. Khalid Khawaja, American University in Dubai, UAE

## TUESDAY, NOVEMBER 20, 2007

<b>09:00-10:40</b>	
<b>Session 7A:</b>	<b>Web Services</b>
Alert Notification and Resource Allocation against Disease Outbreak using Web services	Drake T. T. Lin, Hong Kong University of Science and Technology Dickson K.W. Chiu, Dickson Computer Systems
RBSLA based Implementation for Architectural Management Laws	Ahmed Alghamdi, University of Leicester, UK José Luiz Fiadeiro, University of Leicester, UK Adrian Paschke, RuleML Inc., Canada
Implementing a Facial Recognition System with Alerts and Web Services	K.W. Yu, Hong Kong University of Science and Technology Dickson K.W. Chiu, Dickson Computer Systems Patrick C. K. Hung, University of Ontario, Canada
Applying Vector Space Models to Ontology Link Type Suggestion	Albert Weichselbraun, Vienna University of Economics and Business Administration, Austria Gerhard Wohlgenannt, Vienna University of Economics and Business Administration, Austria Arno Scharl, MODUL University Vienna, Austria
Towards Peer-to-Peer Long-Lived Mobile Web Services	Fahad Aijaz, RWTH Aachen University, Germany Bilal Hameed, Aachen University of Technology, Germany Bernhard Walke, RWTH Aachen University, Germany

<b>Session 7B:</b>	<b>Web Applications II</b>
Fuzzy Radial Basis Function Neural Networks for Web Applications Cost Estimation	Ali Idri, ENSIAS, Morocco Abdelali Zakrani, ENSIAS, Morocco Mohamed Elkoutbi, ENSIAS, Université MohammedV, Morocco, Alain ABRAN, ETS - University of Quebec, Montreal, Canada
Multidimensional Sessions Comparison Method Using Dynamic Programming	Natheer Khasawneh, Jordan University of Science and Technology, Jordan Chien-Chung Chan, University of Akron, USA

Content Classification for Caching under CDNs	George Pallis, Aristotle University of Thessaloniki, Greece Charilaos Thomos, Aristotle University of Thessaloniki, Greece Konstantinos Stamos, Aristotle University of Thessaloniki, Greece Athena Vakali, Aristotle University of Thessaloniki, Greece George Andreadis, Aristotle University of Thessaloniki, Greece
Web2.0 for Machines and Services: Human Oriented Service Identity Management	David J. Lutz, Universitaet Stuttgart, Germany
Cluster Processing of Containment Queries in XML Databases	Ghassan Qadah, American University of Sharjah, UAE

## Session 7C: Pervasive Computing II

P2P File-Sharing Application on Mobile Phones Based on SIP	Liang Li, Institute of Computing Technology, Chinese Academy of Sciences, China Xinshe Wang, Hopen Software Engineering Co., Ltd
Virtual Human Interaction based on Emotional Cognition	Hamido Fujita, Iwate Prefectural University, Japan Jun Hakura, Iwate Prefectural University, Japan Masaki Kurematsu, Iwate Prefectural University, Japan
Integration of Telemedicine Activities in the Czech Republic	Otto Dostal, Masaryk University in Brno, Czech Republic Michal Javornik, Masaryk University in Brno, Czech Republic Karel Slavicek, Masaryk University in Brno, Czech Republic Pavel Ventruba, Masaryk University in Brno, Czech Republic
Document Adaptation and Efficient Exploring of Adapted Document on Mobile Devices	Hassan NADERI, University of INSA of Lyon, France Béatrice Rumpler, University of INSA of Lyon, France Jean-Marie Pinon, University of INSA of Lyon, France
Noise Field Measurements for Safety use of Environmel Electronic and Electrical Equipment	Iman Gamal Eldin Morsi, Arab Academy for Science and Technology, Egypt Hassan Elkamchouchi, University of Alexandria, Egypt

## Session 7D: Advanced Issues in Communication Networks

Induced Packet Loss Reduction by Max-Heap Overlay Construction Based on the Bandwidth-Latency Product Measures	Omar F Hamad, Chonnam National University, Korea Mi-Young Kang, Chonnam National University, Korea Jin-Han Jeon, Chonnam National University, Korea Kyung-Hoon Kim, Chonnam National University, Korea Ji-Seung Nam, Chonnam National University, Korea
Ontology Based Personalized Service in E-marketplaces: A Case Study in a Used Car Matching System	C. K. Lee, Dickson K.W. Chiu
A New Approach in Grouping and Furthest Away Recently for Optimizing Management Cache in Mobile Environment	Amir M. Rahmani, Islamic Azad University, Iran Feridon Shams, University of Beheshti, Iran Majid Momenizadeh, Islamic Azad University, Iran

<b>Morjaan I: Tutorial 4.a</b>	
Software Engineering of video games.	Prof. Boumediene Belkhouche, UAE University, UAE

<b>10:40 - 11:00</b>	<b>Break</b>
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<b>11:00 - 12:40</b>	
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<b>Session 8A: MIMO &amp; Coding Techniques</b>	
Iterative Semi-blind Beamforming Algorithm in MIMO-OFDM Systems	Simin Bokharaiee Najafee, Ferdowsi University of Mashhad, Iran Hossein Zamiri-Jafarian, University of Toronto, Canada
Optimization of DCF Location for WDM Systems using RZ, Chirped RZ and Carrier-Suppressed RZ Modulations	Taha Landolsi, American University of Sharjah, UAE Mohamed El-Tarhuni, American University of Sharjah, UAE
Two-Stage Hybrid Decoding for Low-Density Parity Check codes	Hany Zeidan, German University in Cairo, Egypt Maha M. Elsabrouty, German University in Cairo, Egypt

<b>Session 8B: Computer &amp; Network Security III</b>	
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Simulation Based Study of Communication Induced Checkpointing Protocols Ensuring the RDT Property	Zohra Abdelhafidi, University Amar Telidji, Algeria Mohamed Djoudi, University Amar Telidji, Algeria Mohamed Yagoubi, University Amar Telidji, Algeria
A Hierarchical Approach to the Specification of Privacy Preferences	Yuan Hong, Concordia University, Canada Shuo Lu, Concordia University, Canada Qian Liu, Concordia University, Canada Lingyu Wang, Concordia University, Canada Rachida Dssouli, Concordia University, Canada
An Image Watermarking Scheme based on Image Visual Activity for Copyright Protection	Farhad Keissarian, University of Wollongong in Dubai, UAE
Reverse Engineering: Malware Analysis	Madiah Mohd Saudi, Islamic Science University of Malaysia Emran Mohd Tamil, University of Malaya (UM) Siti Aishah Md Nor, Islamic Science University of Malaysia Mohd Yamani Idna Idris, Univeristy of Malaya (UM)
A Digital ID Purse Mechanism using USIM in a Mobile Environment	Dongho Song, Korea University, Korea Sun Hee Lim, Korea University, Korea Okyeon Yi, Kookmin University, Korea Jongin Lim, Korea University, Korea

<b>Session 8C: Image Computing</b>	
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New image matching method based on spatial inter-region relationships	Ines Karouia, ISI, Tunisia Ezzeddine Zagrouba, ISI, Tunisia
Decomposition of an alignment problem of two 3D images by a multi-agent approach	Mohamed A. Jallouli, Institut Supérieur d'Informatique, Tunisia Ezzeddine Zagrouba, ISI, Tunis, Tunisia Narjes Doggaz, Faculté des Sciences de Tunis, Tunisia Mongi Abidi, IRIS, Tunisia
Interactive Object and Collision Detection Algorithm Implementation on a Virtual Museum	Riri Fitri Sari, University of Indonesia, Indonesia Muliawan, University of Indonesia, Indonesia

based on Croquet	
A Hybrid Digital Image Watermarking Algorithm	Ali Al-Haj, University of Jordan, Jordan

<b>Session 8D: QoS &amp; Resource Allocation</b>	
Quality of Service Support and Local Recovery Approach for ODMRP Multicast Routing in Ad hoc Networks	Mehdi Effatparvar, Islamic Azad University, Iran Amir Dareshorzadeh, Iran University of Science and Technology, Iran Mehdi Dehghan, AmirKabir University of Technology, Iran Ali Movaghar, Sharif University of Technology, Iran Mohammad Reza Effatparvar, Islamic Azad University, Iran
Fair-Sharing Resource Management Schema for Multi-service Wireless and Mobile Networks	Hang Chen, Johnson C. Smith University, USA Magdy Attia, Johnson C. Smith University, USA
Opportunistic Uplink Scheduling for 3G LTE Systems	Mohammed Al Rawi, Helsinki University of Technology, Finland Riku Jäntti, Helsinki University of Technology, Finland Johan Torsner, Ericsson Research, Finland Mats Sägfors, Ericsson Research, Finland
Preemption Scheme for Improving Source Level Fairness in Optical Burst Switching Networks	Tananun Orawiwattanakul, The Graduate University for Advanced Studies Japan Yusheng Ji, National Institute of Informatics, Japan
Optimal Frame Length for Keeping Normalized Goodput with Lowest Requirement on BER	Jian Qi, University of Quebec, INRS-EMT, Canada Sonia Aissa, University of Quebec, INRS-EMT, Canada Xinsheng Zhao, Southeast University Nanjing, China

<b>Morjaan I: Tutorial 4.b</b>	
Software Engineering of video games.	Prof. Boumediene Belkhouche, UAE University, UAE

<b>12:40 - 13:30</b>
Closing ceremony
Best paper award announcement