

EM-COM 2009 PROGRAM SCHEDULE

December 10, 2009 (Thursday)

13:00-14:00	Registration
14:00-15:00	Invited Talk 1 : Ubiquitous/Pervasive Computing and Intelligence: Visions and Challenges by Prof. Laurence T. Yang , St. Francis Xavier University, Canada (Grand Ballroom)
15:00-15:30	Coffee Break
15:30-16:30	Invited Talk 2 : An Industrial Cloud: Integrated Operations in Oil and Gas in the Norwegian Continental Shelf by Prof. Chunming Rong , University of Stavanger, Norway (Grand Ballroom)
16:30-18:30	Session 1 (Em-Com-09) Embedded Computing and Its Applications 1 (6 papers) (Crystal Hall 5)
19:00~20:30	Reception
<p style="text-align: center;">Note :</p> <ol style="list-style-type: none"> 1. A paper presentation should be made by one of authors of the paper, during a 20 minute time slot (15 minutes for the presentation itself and 5 minutes for Q/A). 2. All speakers of each session should meet the session chair at its room 10 minutes before the session. 3. We will prepare Windows XP laptops running the Adobe Reader and Microsoft Office 2003 for paper presentations. Please prepare your presentation files for being read by those applications. 4. For your information, this is an IEEE Technical Activities Policy (effective February 2009): "IEEE reserves the right to exclude a paper from distribution after the conference (e.g., removal from IEEE Xplore) if the paper is not presented at the conference." 5. If you have any query, please feel free to contact the EM-Com-09 secretary, Soo-Kyun Kim (nicesk@gmail.com) or the EM-Com-09 Program Co-Chair, Jin Kwak(jkwak.sch@gmail.com). 	

December 11, 2009 (Friday)	
08:40-10:20	Session 2 (Em-Com-09) Embedded Computing and Its Applications 2 (5 papers) (Crystal Hall 4)
10:20~10:40	Coffee Break
10:40-12:00	Session 3 (Em-Com-09) Embedded Computing and Its Applications 3 (4 papers) (Crystal Hall 4)
12:00~13:00	Lunch
13:00~14:00	Invited Talk 3 : Mobility Management for Networks in Motion by Prof. Mohammed Atiquzzaman , University of Oklahoma, USA (Grand Ballroom)
14:00~14:20	Break
14:20~15:20	Invited Talk 4 : Information Assurance in Ubiquitous Computing by Prof. Stephen S. Yau , Arizona State University, USA (Grand Ballroom)
15:20~:15:50	Coffee Break
15:50~:17:50	Session 4 (Em-Com-09) Embedded Computing and Its Applications 4 (6 papers) (Crystal Hall 4)
19:00~21:00	Banquet

December 12, 2009 (Saturday)	
08:40-10:20	Session 5 (Em-Com-09) Multimedia Computing 1 (5 papers) (Crystal Hall 3)
10:20~10:40	Coffee Break
10:40-12:00	Session 6 (Em-Com-09) Multimedia Computing 2 (3 papers) (Crystal Hall 3)
12:00~13:00	Lunch
13:00~14:20	Session 7 (UMCC-09) (4 papers) (Crystal Hall 3)

DETAILED SCHEDULE FOR EM-COM 2009

December 10, 2009 (Thursday)**13:00- 14:00 Registration****14:00- 15:00 Invited Talk 1 (Grand Ballroom)****Ubiquitous/Pervasive Computing and Intelligence: Visions and Challenges***Prof. Laurence T. Yang, St. Francis Xavier University, Canada***15:00- 15:30 Coffee Break****15:30- 16:30 Invited Talk 2 (Grand Ballroom)****An Industrial Cloud: Integrated Operations in Oil and Gas in the Norwegian Continental Shelf***Prof. Chunming Rong, University of Stavanger, Norway***16:30- 18:30 Session 1: Embedded Computing and Its Applications 1 (Crystal Hall 5)
(Chair : V. Chandra prakash, KL University, India)**

- **A framework for stream programming on DSP**
Changqing xun, Mei wen, Wei wu, Chunyuan zhang (Computer School, National University of Defense Technology, China)
- **High Speed USB 2.0 Interface for FPGA Based Embedded Systems**
Fatemeh Arbab Jolfaei, Neda Mohammadizadeh, Mohammad Sadegh Sadri, Fatemeh FaniSani (Isfahan University of Technology, Iran, Islamic Republic of)
- **Implicit Data Permutation for SIMD Devices**
Li Shen (School of Computer, National University of Defense Technology, Changsha, China), Libo Huang(National University of Defense Technology, Changsha, China), Nong Xiao, Zhiying Wang (School of Computer, National University of Defense Technology, Changsha, China)
- **TMS : Visual Monitoring of Trusted Platform Board for Trust Computing based on Web**
Se-Kwang Seo (Air Force in Ministry of National Defense, Korea), Sung-Jin Baek, Chang-Wu Lee, Sung-Won Kim, Sun-Mi Park, Young-Sik Jeong (Wonkwang University, Korea)
- **A Framework for the Correction of Multi-Bit Errors in Multi-Core Processors**
Hongjun Dai, JiuTian Zhang (Shandong Univ., China)
- **Use Object-Oriented Platform to Facilitate FPGA-based Computing in Embedded Systems**
Zhilei Chai, Ping Zhang (Jiangnan University, China), Mi Zhang (Fudan University, China)

19:00- 20:30 Reception

December 11, 2009 (Friday)

08:30- 10:20 [Session 2 : Embedded Computing and Its Applications 2](#) (Crystal Hall 4) (Chair : Dongsheng Wang, Tsinghua University, China)

- **On the Handling Node Failure: Energy-Efficient Job Allocation Algorithm for Real-time Sensor Networks**
Hamid Karimi, Mehdi Kargahi, Nasser Yazdani (University of Tehran, Iran)
- **Smartcard-based Secret Sharing for Secure Fingerprint Verification**
Hanna Choi, Wooyong Choi, Daesung Moon, Sungju Lee, Yongwha Chung, Sungbum Pan
- **An Automatic RFID and Wireless Sensing System on a GHS-based Hazardous Chemicals Management Platform**
Stephen Tseng, KuoYuan Hwa, IFan Chang, Wenlung Li (National Taipei University of Technology, Taiwan)
- **A TPN based framework for the specification of real time embedded systems**
Abdelkrim Abdelli, Youcef Hammal (USTHB University, Algeria)
- **PRESSNoC: Power-Aware and Reliable Encoding Schemes Supported Reconfigurable Network-on-Chip Architecture**
Jih-Sheng Shen, Chun-Hsian Huang, Pao-Ann Hsiung (National Chung Cheng University, Taiwan)

10:20- 10:40 Coffee Break

10:40- 12:00 [Session 3 : Embedded Computing and Its Applications 3](#) (Crystal Hall 4) (Chair : Songyot Nakariyakul, Thammasat University, Thailand)

- **Network Victim Cache: Leveraging On-Chip Networks for Managing Shared Caches in Chip Multiprocessors**
Jinglei Wang, Dongsheng Wang, Yibo Xue, Haixia Wang (Tsinghua National Laboratory for Information Science and Technology, China)
- **Power-Aware Mapping for Network-on-Chip Architectures under Bandwidth and Latency Constraints**
Xiaohang Wang (Zhejiang University, University of Nevada, Las Vegas, USA), Mei Yang, Yingtao Jiang (University of Nevada, Las Vegas, United States), Peng Liu (Zhejiang University, China)
- **Model Checking Assembly Code of an Industrial Knitting Machine**
Thomas Reinbacher, Martin Horauer (University of Applied Sciences Technikum Wien, Austria), Bastian Schlich, Jörg Brauer (RWTH Aachen University, Germany), Florian Scheuer (TEXION GmbH, Germany)
- **A Java Software Stack for Resource Poor SensorNodes: Towards Peer-to-Peer Jini**
Nuno Costa (CIIC-Superior School of Technology Management, Portugal), Carlos Serôdio (CITAB-UTAD University, Portugal), António Pereira (CIIC-Superior School of Technology and Management, Portugal)

12:00- 13:00 Lunch

13:00- 14:00 Invited Talk 3 (Grand Ballroom)

Mobility Management for Networks in Motion

Prof. Mohammed Atiquzzaman, University of Oklahoma, USA

14:00- 14:20 Break

14:20- 15:20 Invited Talk 4 (Grand Ballroom)

Information Assurance in Ubiquitous Computing

Prof. Stephen S. Yau, Arizona State University, USA

15:20- 15:50 Coffee Break

**15:50- 17:50 Session 4 : Embedded Computing and Its Applications 4 (Crystal Hall 4)
(Chair : Stephen Tseng, National Taipei University of Technology, Taiwan)**

- **A Time Tree for Scheduling and Topology Control in Wireless Sensor Networks**
Kilhung Lee (Seoul National University of Technology, Korea)
- **Web-based Visualization of Atmospheric Nucleation Processes for Mobile Embedded Clients**
Shanrui Liu, Lihong Shang, Yuyu Zhou (Beijing University of Aeronautics Astronautics, China), Jinzhu Gao (University of Pacific, USA), Rui Ding (University of Minnesota, USA), Yi Liu (Chinese Academy of Sciences, China)
- **Face Processing on Low-Power Devices**
Marco Morana, Edoardo Ardizzone, Marco La Cascia (Università degli Studi di Palermo, Italy)
- **Data Quality Management for Flash Memory based Read Intensive Embedded and Multimedia Applications**
Sanam Shahla Rizvi, Tae-Sun Chung (Ajou University, Korea)
- **Energy-Efficient Meter Data Aggregation Protocol for (AMR) Automatic Meter Reading Networks**
Kwang-il Hwang (Incheon City College, Korea, Republic of), Sang-soo Yeo (Mokwon University, Korea), Doo soon Park (Soonchunhyang University, Korea), Jong Hyuk Park (Seoul National University of Technology, Korea)
- **Convulsive Noise Filtering in Power Analysis on Smartcards Using the Cepstrum**
Junki Kang, Deok-Gyu Lee, Dooho Choi (ETRI, Korea)

19:00- 21:00 Banquet

December 12, 2009 (Saturday)

08:30- 10:20 [Session 5 : Multimedia Computing 1 \(Crystal Hall 3 \)](#)

(Chair : Sastry KR Jammalamadaka, KL University, India)

- **File metadata management in Embedded Linux**
Simone Bolognini, Nicola Corriero, Vittoria Cozza (University of Bari, Italy)
- **Fast Implementation of Spatial Averaging**
Songyot Nakariyakul (Thammasat University, Thailand)
- **Environment Recognition from Audio Using MPEG-7 Features**
Ghulam Muhammad, Khaled Alghathbar (Center of Excellence in Information Assurance, King Saud University, Saudi Arabia)
- **Capturing Contextual Relationship for Effective Media Search**
Guang-Ho Cha (Seoul National University of Technology, Korea)
- **Color Image of Tamper Detection and Recovery using Block-based Watermarking**
Na Wang, Chung-Hwa Kim (Chosun University, Korea)

10:20- 10:40 Coffee Break

10:40- 12:00 [Session 6 : Multimedia Computing 2 \(Crystal Hall 3 \)](#)

(Chair : Guang-ho Cha, Seoul National University of Technology, Korea)

- **Privacy Protection Technology in Video Surveillance System**
Sung Bum Pan, Hae-Min Moon (Chosun Univ., Korea, Republic of), Chang Ho Seo (Kongju Univ., Korea), Yongwha Chung (Korea Univ., Korea)
- **Object Reidentification in Multiple Cameras System**
Icaro Oliveira, Jose Pio (UFAM, Brazil)
- **Intelligent Adaptation Model based on MPEG-21 Framework**
Kim Svetlana, Yoon YongIk (Sookmyung Women University, Korea)

12:00- 13:00 Lunch

13:00- 14:20 [Session 7 : UMCC-09 \(Crystal Hall 3 \)](#)

(Chair : Kwang-il Hwang, Incheon City College, Korea)

- **Analysis and optimization of embedded software energy consumption on the source code and algorithm level**
gang luo, bing guo (SiChuan University, China), yan shen (University of Electronic Science & Technology of China, China), HaiYan Liao, lei ren (SiChuan University, China)
- **Determinants of Intra-Industry Trade in Capital and Technology Products between China and the US**
jie lv (China University of Geoscience, School of Economy and Management, China), shi qiang (China University of Geoscience, China)
- **A Formal Framework for Modeling External Behavior of an Embedded System As a Black Box Structure**
Sastry JKR, Chandra Prakash V, Reddy LSS (K L University, India)
- **A Formal Framework for Verification and Validation of External Behavioral Models of Embedded Systems through Use Case Models**
Sastry JKR, Chandra Prakash V, Reddy LSS (K L University, India)