

8th International Symposium on Computer Networks, ISCN'08 Final Program

June 18-20, 2008
School of Engineering Building, Top Floor
South (Güney) Campus
Boğaziçi University, Istanbul



IEEE TURKEY SECTION



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TURKCELL

June 18, 2008 Wednesday		
Time	Room Europa	Room Asia
09:00-10:00	Opening Remarks: <ul style="list-style-type: none"> Fatih Alagöz, Program Co-Chair, Boğaziçi University, Istanbul M. Ufuk Çağlayan, General Chair, Boğaziçi University, Istanbul Keynote Lecture: Yoram Ofek, Trento University, Italy, <i>The Future Internet: Challenges and Solutions</i>	
10:00-10:30	Coffee Break	
10:30-12:30	Session 1.1: Mesh and Sensor Networks (Chair: Cem Ersoy) <ul style="list-style-type: none"> <i>Single Gateway Placement in Wireless Mesh Networks</i>, Skanda N. Muthaiah and Catherine P. Rosenberg <i>H-MAC : A Multi-Channel Hybrid MAC Protocol for Wireless Mesh Networks</i>, D. Tandjaoui, M. Doudou, I. Romdhani, A. Al-Dubai <i>Impact of Clustered Failures on Connectivity of Wireless Sensor Networks</i>, Dogu Arifler <i>A Power Efficient Disaster Detection Scheme Using Wireless Sensor and Actuator Networks</i>, Salim Eryiğit and Tuna Tuğcu 	Session 1.2: Network Security – 1 (Chair: Tuğkan Tuğlular) <ul style="list-style-type: none"> <i>Design and Performance Analysis of an Extended P2P Data Sharing Scheme with Security and Flexibility</i>, Goo Yeon Lee, Yong Lee, Hwa Jong Kim, Choong Kyo Jeong and Dong Eun Lee <i>MLCC: Multi-Layers Connected Chains Scheme for Multicast Source Authentication</i>, Hamdi Eltaief and Habib Youssef <i>Monitoring of Policy Operations in a Distributed Firewall Environment</i>, Oğuzhan Çakı, Tuğkan Tuğlular, Füsün Çetin <i>A Formal Security Analysis of Secure AODV (SAODV) using Model Checking</i>, A. Burak Gürdağ and M. Ufuk Çağlayan
12:30-14:00	Lunch Break	
14:00-15:30	Session 1.3: Wireless Sensor Networks (Chair: Fatih Alagöz) <ul style="list-style-type: none"> <i>An Energy-Efficient Clustering Mechanism Considering Overlap Avoidance in Wireless Sensor Networks</i>, Hoon Choi, Hyuntae Cho, Yunju Baek <i>On-Demand Coverage Problem in Wireless Video Sensor Networks</i>, M. Aykut Yiğitel, Tolga Tolgay and Cem Ersoy <i>Exploring the Effect of the Network Parameters of Video Sensor Networks</i>, Yunus Durmuş, Atay Özgövde, Ilker Demirkol, Cem Ersoy 	Session 1.4: Network Performance (Chair: Semih Bilgen) <ul style="list-style-type: none"> <i>Equilibrium-RED: Adjusting RED's Dropping Probability for Maximum Fairness and Performance</i>, S. Dimitriou and V. Tsaoussidis <i>Federated Simulation of Network Performance Using Packet Flow Modeling</i>, Turan Demirci and Semih Bilgen <i>Analytical Model for Topology Dependence in Peer-to-Peer Anti-Entropy Spreading</i>, Emre Iskender, Mine Çağlar, Öznur Özkasap
15:30-16:00	Coffee Break	
16:00-18:00	Session 1.5: Mobile Wireless Networks – 1 (Chair: M. Salamah) <ul style="list-style-type: none"> <i>Generic Petri-Net-Based Model to Study Data Dissemination in Mobile Wireless Ad Hoc Networks</i>, A. Kostin, G. Öz Akıncı, Z. Sharghi, and A. M. Oyeniyi <i>SJ-Scheme: A Two-Disjoint Level Priority Handoff Scheme for Integrated Multimedia Cellular Networks</i>, M. Salamah and G. O. Jibril <i>rtPS Uplink Scheduling Algorithms for IEEE 802.16 Networks</i>, M. Cenk Ertürk and Nail Akar <i>TCP Performance in Wireless Ad Hoc Networks</i>, Semra Yılmaz and Y. Murat Erten 	Session 1.6: Network Security – 2 (Chair: Attila Özgüt) <ul style="list-style-type: none"> <i>Security Policy Specification for Multi-domain Mobile Networks</i>, Devrim Ünal and M. Ufuk Çağlayan <i>Uses of PKI for Process Authorization</i>, Feyza Eryol and Attila Özgüt (59) <i>A Framework Based on Continuous Security Monitoring</i>, Volkan Ertürk, Ali Arifoğlu and Atilla Özgüt <i>Performance Evaluation of Header Compression over SPEG included Satellite Links</i>, Ailin Parichehreh, Behrooz Eliasi, Ahmad Salahi <i>Two Step Acceleration: A New Method For Enhancing VPN Performance Over Satellite Links</i>, Azam Eidi, Behrooz Eliasi, Mehran Mahramian Moallem
18:30	Reception and Dinner	

June 19, 2008 Thursday		
Time	Room Europa	Room Asia
09:00-10:00	Invited Speakers: <ul style="list-style-type: none"> Güneş Kurt, Turkcell, Istanbul, Turkey, <i>Challenges in the Deployment and Management of Next Generation Networks</i> Bora Eliaçık, Argela, Istanbul, Turkey, <i>IMS and Service Delivery Platforms</i> 	
10:00-10:30	Coffee Break	
10:30-12:30	Session 2.1: Computer Networks (Chair: Işık Aybay) <ul style="list-style-type: none"> <i>An Evaluation of Web Services Tools to Address Efficient Information Retrieval for Network Management</i>, Aimilios Chourmouziadis and George Pavlou <i>Proposal of Bi-Directional ROADM for use in Regional IP-over-CWDM Networks</i>, Y. Katsuyama, M. Hashimoto, A. Ueno, Y. Izumi, K. Ikushima, MD. Nooruzzaman and O. Koyama <i>An Adaptative switching TE based on notification subscription within MPLS domains</i>, Ali El Kamel and Habib Youssef <i>A Fault Tolerant Red-HI Based Load Management Policy for a Distributed Multimedia Streaming System</i>, Işık Aybay and Mohammad Ahmed Shah 	Session 2.2: Network Evolution (Chair: Gamze Seckin) Invited Session Organized by Gamze Seckin <ul style="list-style-type: none"> <i>3G Networks and Evolution</i>, Erol Hepsaydır <i>Advanced Features of WiMAX Forum Network Architecture</i>, Alper E. Yegin, Hyoung-Kyu Lim, Jicheol Lee, Jungshin Park <i>Converged Mobile Networks and Services</i>, Gamze Seçkin and Tony Sandidge <i>Evolutionary Service Delivery Approach for Telecom Operators</i>, Barış Çenberci
12:30-14:00	Lunch Break	Lunch Break
14:00-15:30	Session 2.3: Network and Applications – 1 (Chair: Emin Anarım) <ul style="list-style-type: none"> <i>A Data Extractive Module for Integrated Synchronization Gateway System based on SyncML</i>, DaeJin Jang, JuGeun Park, KeeHyun Park, MyungSuk Jang, GeunJin Lee <i>Effect of Bounded Delay on Deterministic Consensus Algorithms via Averaging</i>, Doghonay Arjmand, Mehmet Akar and Emin Anarım <i>A Hybrid SOA Approach for Building a High Performance, Agile SDP</i>, Engin Deveci 	Session 2.4: 2-3-4G Networks (Chair: Tuna Tuğcu) <ul style="list-style-type: none"> <i>Distributed Solution to Mobile Number Portability in Macedonia</i>, Ivan Ivanovski and Danco Davcev <i>An End-to-End QoS Architecture for All-IP 4G Mobile Networks</i>, Ali Akkaya and Tuna Tuğcu <i>Cyclic MAP Information Element in WiMAX Networks</i>, Hasan Canarslan, Fatih Alagöz, Tuna Tuğcu
15:30-16:00	Coffee Break	Coffee Break
16:00-18:00	Session 2.5: Network and Applications – 2 (Chair: Tuna Tuğcu) <ul style="list-style-type: none"> <i>Mobile Positioning Using Received Signal Strength Measurements</i>, Muhterem Senel, Gencay Mutlu Ölçer, Mehmet Akar, F. Kerem Harmancı, Emin Anarım <i>Synthetic Aperture Radar: Systems and Applications</i>, M. Bora Zeytinci, Gürkan Gür and Fatih Alagöz <i>AKOM Disaster Communications Structure</i>, M. Esmer and A. Köse <i>A Parametric Human Body Modelling Tool</i>, Başar Uğur and Ali Vahit Şahiner <i>An Area Efficient CMOS Adder Based On Manchester Carry Cell Using the Arithmetic A2 Redundant Binary Representation for Mixed Neural Networks with On-Chip Learning</i>, H. Boukadida, Z. Gafsi, H. Mehrez, K. Besbes 	Session 2.6: Mobile Wireless Networks - 2 (Chair: A. Yongaçoğlu) <ul style="list-style-type: none"> <i>Novel Indexing Algorithm for Multi-rate Support in IEEE 802.11 Scheduled Access</i>, Özgür Ekici and Abbas Yongaçoğlu <i>Factors that Impact Link Quality Estimation in Personal Networks</i>, Jinglong Zhou, Martin Jacobsson, Ertan Onur and Ignas Niemegeers <i>Call Admission Control Strategy for Dynamically Setting the Number of Guard Channels in Wireless Multimedia Networks</i>, Nagla O. Mohamed and Derviş Z. Deniz <i>Novel Intelligent BSS Planning/Dimensioning Tool For GSM/DCS1800/GPRS Networks</i>, Mohamed I. Assem, Hesham M. El Badawy, Bahnasy Nossier
	End of the Symposium	

June 20, 2008 Friday	
Time	Room Europa
09:30-12:30 with 15 min Coffee Break at 11:00am	<p>Tutorial 1: Systems Architecture Overview of 3GPP's Next Generation Mobile Network Dr. Irfan Ali, Motorola Turkey</p> <p>The third generation partnership project (3GPP), the organization that defined mobile networks GSM and UMTS, are defining the evolution to 3G UMTS. This 4G mobile technology goes by several acronyms: Long Term Evolution (LTE), Systems Architecture Evolution (SAE) and Evolved Packet System (SAE). This tutorial will provide a overview of systems aspects of SAE/LTE, architecture of the radio access network and the core network, the different network elements and their interactions, the protocols, security aspects and procedures used during both idle and active mode mobility. How the architecture differs from that of 3G UMTS and how SAE/LTE is expected to interwork with existing 2G/3G networks will also be covered. The tutorial will also provide an overview of how the evolved packet core (EPC) is expected to integrate non-3GPP access technologies such as WiMax and the evolution of CDMA accesses, such as high speed packet data (HSPD), using IETF based mobility schemes such as proxy mobile IP (PMIPv6). The tutorial will be focused more on system level aspects and will not cover radio aspects in detail.</p> <p>Short Bio: Dr. Ali (irfan.ali@motorola.com) works for Motorola, Turkey and is a member of Motorola's Network Advanced Technology Group focusing on 4G Standards. For the last three years, he has been participating in 3GPP standards body for the standardization of core-network aspects of 3GPP's 4G mobile network: Long Term Evolution (LTE), aka Systems Architecture Evolution (SAE). He is also the Rapporteur of the architecture specification document, TS 23.402, for integration of non-3GPP accesses (Wimax etc) with 3GPP accesses (LTE/UTRAN/GERAN). Dr. Ali received a PhD from RPI in 1993 under Professor Ken Vastola.</p>
12:30-14:00	Lunch Break
14:00-17:00 with 15 min Coffee Break at 15:30am	<p>Tutorial 2: Wireless Sensor Networks Dr. Cem Ersoy and and Dr. Tuna Tuğcu Department of Computer Engineering, Boğaziçi University, Istanbul</p> <p>This half day tutorial aims introducing concepts and research topics in wireless sensor networks with a top down approach. We will cover topics ranging from MAC, routing, and transport layer protocols to topology, sensor/actuator networks, and new research topics in the field.</p> <p>Short Bio: Dr. Ersoy (ersoy@boun.edu.tr) received his B.S. and M.S. degrees in electrical engineering from Bogaziçi University, Istanbul, Turkey, in 1984 and 1986, respectively. He worked as an R&D engineer in NETAS, A.S., between 1984 and 1986. He received his Ph.D. in electrical engineering from Polytechnic University, Brooklyn, New York, in 1992. Currently, he is a full professor in the Computer Engineering Department of Bogaziçi University. His research interests include performance evaluation and topological design of communication networks, wireless networks and mobile applications.</p> <p>Short Bio: Dr. Tugcu (tugcu@boun.edu.tr) received his BS and PhD degrees in Computer Engineering from Bogazici University in 1993 and 2001, respectively, MS degree in Computer and Information Science from New Jersey Institute of Technology in 1994. He pursued post-doctorate study in Broadband and Wireless Networking Lab at Georgia Institute of Technology until July 2002. He also worked as a visiting assistant professor at Georgia Institute of Technology (Savannah Campus) for two years. He is currently an assistant professor in Computer Engineering at Bogazici University. His research interests include real-time systems, communication networks, and wireless communications.</p>