

**Communication Networks and Distributed Systems Modeling and Simulation (CNDS) 2004
Technical Program (Mon Jan 19 – Thu Jan 22)**

(Paper numbers appear if and only if we have received your final paper as of 1-06-2004)

Monday, January 19 2004

Session 1: Mon Jan 19 10:30 – 12:00

C112: Modeling and Performance Evaluation of Agent and Client/Server-Based Information Retrieval Systems -- A Case Study

Yu Jiao and Ali R. Hurson, The Pennsylvania State University

C066: Analyzing Efficiency and Resilience of Peer-to-Peer Models

Wei Yu

C007: Evaluation of Mobility-Aware Personalized Services in Wireless Broadband Hotspots

Ian Herwono , Aachen University Kopernikusstr, Joachim Sachs and Ralf Keller Ericsson Eurolab Deutschland

A Mobile Application-Transparent Adaptation Web Services Environment

Celso Maciel Da Costa and Guy Bernard and Giovanni Corderiro Barroso

Session 2: Mon Jan 19 1:30 – 3:00

C113: A System Architecture for Pervasive Computing

Bakhshinder Singh and Harloveleen Kaur and Guru Nanak Dev Engineering College

C019: A Holistic Approach for Pervasive Computing Environments

Sergio Maffioletti, Soraya Kouadris M. and Beat Hirsbrunner, University of Fribourg, Switzerland

C010: A JINI Based Framework for Nomadic Computing

Jinhua Guo and Sudha Ramaswamy, University of Michigan-Dearborn

Session 3: Mon Jan 19 3:30 – 5:00

C022: Performance Analysis of the IEEE 802.11 Power Saving Mode

Rong Zheng, Jennifer Hou and Lui Sha, University of Illinois UC

C015: Universal Hash Functions for Emerging Ultra-Low-Power Networks

K. Yuksel, J.-P. Kaps, and B. Sunar, Worcester Polytechnic Institute

C025: Evaluation of Cartesian-based Routing Metrics for Wireless Sensor

Ayad Salhieh and Loren Schwiebert, Wayne State University

Device Independent Remote Adaptations for Power Optimization using Distributed Middleware

Shivajit Mohapatra, Christopher Bell & Nalini Venkatasubramanian, University of California at Irvine

Reward the Contribution -- A Power Conservation Routing Protocol in Wireless Ad Hoc Networks Using Shapley Value

Jianfeng Cai and Udo Pooch, Texas A&M University

Tuesday, January 20 2004

Session 4: Tue Jan 20 8:30 – 10:00

C111: A New Thermal Infrared Camera Calibration Approach Using Wireless MEMS Sensors

Peter Bajcsy and Sunayana Saha, University of Illinois at Urbana-Champaign

Reconfigurable Fabric: An enabling technology for pervasive medical monitoring

Fang-Chun Chen, Foad Dabiri, Roozbeh Jafari, Eren Kursun, Vijay Raghunathan, Thomas Schoellhammer, Doug Sievers, Deborah Estrin, Glenn Reinman, Majid Sarrafzadeh, Mani Srivastava, Ben Wu and Yang Yang, UCLA

e-TAGs: e-Textile Attached Gadgets

David I. Lehn, Craig W. Neely, Kevin Schoonover, Thomas L. Martin, and Mark T. Jones Virginia Polytechnic Institute

Efficient Web Browsing on Small-Screen Devices

Yue Weining, Wang Yue, Tan Jizhi, Wang Heng, Wang Guoping and Dong Shihai, Peking University, Beijing

Session 5: Tue Jan 20 10:30 – 12:00

Towards A Universal Trust Model for Pervasive Computing

Rui He, Jianwei Niu, Jian Ma, Jianping Hua, Beijing University of Aeronautics and Astronautics

C001: Secure Authentication and Communication of Ad hoc Networks: Application of Synchronous Dynamic Encryption System

Hamdy S. Soliman and Mohammed Omari, New Mexico Institute of Mining and Technology

C013: A Light-Weight Authentication Scheme for Secured Routing in Ad Hoc Networks

Hongmei Deng and Dharma P. Agrawal, University of Cincinnati

Session 6: Tue Jan 20 1:30 – 3:00

Power Aware Scheduling for Real-Time Systems with (m; k)-Guarantee

Gang Qaan, Linwei Niu, James P. Davis, University of South Carolina

C011: EOos: An Energy Efficient Oos Protocol for Wireless Sensor Networks

Hidayet Ozgur Sanli, Hasan Cam, Arizona State University and Xiuzhen Cheng George Washington University

An Adaptive Call Admission Policy for Broadband Multi-Services Mobile Wireless Networks Using Stochastic Control

Gan Liu, Guangxi Zhu, Weimin Wu and Yingzhuang Liu, Huazhong University of Science and Technology

Service -Based Architectural Framework of Multimedia Content Adaptation for Pervasive Computing Environment

Girma Berhe, Lionel Brunie and Jean-Marc Pierson, Lab. d'Ingenierie des Systems d'Information (LISI)

Session 7: Tue Jan 20 3:30 – 5:00

Queuing Theoretic Model for Service Discovery in Ad-hoc Networks

Dipanjan Chakraborty, Avinash Shenoi, Yelena Yesha, Yacov Yesha, Anupam Joshi, University of Maryland Baltimore County, Mukesh Singhal, University of Kentucky

C005: Two Phase Service Discovery and Optimization Based On Mobility

Man Yuan, Jianping Hu, Jian Ma, Da Qing Petroleum Institute, Dong Feng Beijing Univ. of Area.& Astro

C008: On the Optimality of WLAN Location Determination Systems

Moustafa A. Youssef, Ashok Agrawala, University of Maryland College Park

Handling Heterogeneity in Location Information Services

Ronald van Eijk, Arjan Peddemors, Johan de Heer, Alfons Salden, Petri Matt and Ville Haataja, Telematica Instituut, Enschede, The Netherlands

Wednesday, January 21 2004

Session 8: Wed Jan 21 8:30 – 10:00

C108: A Novel Paradigm for Geographic Routing in Ad Hoc Networks: Comparison of Geograms and Geocircuits

A. Bruce McDonald*, Sophia Fotopoulou-Prigipa, Northeastern University

C014: An Analytical Study of Connectivity Changes in Mobile Ad Hoc Network Simulations

Tao Lin, Scott F. Midkiff, Jahng S Park and You Lin, Virginia Tech

Location Based Routing Overhead reduction in Manets Routing Protocols

Wilfred Gikaru, Dresden, Germany

Session 9: Wed Jan 21 10:30 – 12:00

Mobile Geo-location Algorithm based on LS-SVM

Sun Guo-lin and Guo Wei, University of Electronic Science and Technology of China

C021: Performance Analysis of the IEEE 802.11 Distributed Coordination Function in Ideal and Error-prone Channels

Jun Yin, Qing-An Zeng, and Dharma P. Agrawal, University of Cincinnati

C024: A New Backoff Algorithm for the IEEE 802.11 Distributed Coordination Function

Jing Deng, Member, IEEE, Pramod K. Varshney, Fellow, IEEE and Zygmunt J. Haas, Senior Member, IEEE

Joint source-channel adaptive image coding with punctured convolutional codes and trellis-coded quantization

Lv Jingyuan, Yuan Dongfeng, Shandong Univ

Session 10: Wed Jan 21 1:30 – 3:00

C020: CLIN: A CLuster-based Interest Protocol for Wireless Sensor Networks

Bruno Galvao, Federal University of Rio De Janeiro

C006: Size-Controlled Dynamic Clustering in Mobile Wireless Sensor Networks

Tim Nieberg, Paul Havinga, Johann Hurink, University of Twente

C003: Context Aware Dynamic Access Control for Pervasive Computing

Guangsen Zhang, Manish Parashar, Rutgers University

Session 11: Wed Jan 21 3:30 – 5:00

C016: An Integrated Infrastructure for Developing Sensor-Based Awareness and Decision Making Tools

Carmen M. Pancarella, Adele B. Doser, Nina M. Berry, Ron Kyker, and Steve Tucker, Sandia National Laboratories

Distributed Context Processing Architecture for an Intelligent Environment

Teddy Mantoro, C. W. Johnson, Australian National University

C017: Global State Context Prediction Techniques Applied to a Smart Office Building

J. Petzold I, F. Bagci, W. Trumler, T. Ungerer, and L. Vintan, University of Augsburg and University of Sibiu, Romania

C012: Know Your Whereabouts

Susanna Pirttikangas, Jukka Riekkö, Seppo Porspakka, Juha Rög, University of Oulu, Finland

Thursday, January 22 2004

Session 12: Thu Jan 22 8:30 – 10:00

C028: Simulation of Swarm Intelligence-Based Message Broadcast in Highly Mobile Ad Hoc Networks

Michael G Kirkpatrick, Gregory R Madey

Supporting Users consent Decisions to personal information collection: Fuzzy Approaches

Amr Ali Eldin and Rene Wagenaar, Delft University of Technology

C002: An Ontology-based Context Model in Intelligent Environments

Tao Gu, Xiao Hang Wang, Hung Keng Pung, Da Qing Zhang, National University of Singapore

Providing a Web Interface for Active Spaces

James F. Bresler, Roy H. Campbell, Jalal Al-Muhtadi, University of Illinois at Urbana-Champaign

Session 13: Thu Jan 22 10:30 – 12:00

A Deterministic Broadcast Protocol for Ad hoc Networks

Koushik Sinha and Pradip K. Srimani, Clemson University

C018: Analysis of NAT-Based Internet Connectivity for Multi-Homed On-Demand Ad Hoc Networks

Paal Engelstad, Geir Egeland, Do Van Thanh, University of Oslo

C109: Simulation and analysis of UDP packet exchange in wireless ad hoc groups

Satoko Itaya, Masakatsu Kosuga, Peter Davis,

C009: Proximate Runner Protocol for Routing in Mobile Ad-Hoc Networks

Mukundan Venkataraman* and Bhakthavathsalam R, Indian Institute of Science

Session 14: Thu Jan 22 1:30 – 3:00

C027: A Scalable Workbench for Implementing and Evaluating Distributed Applications in Mobile Ad Hoc Networks

Johannes K. Lehnert, Daniel Görden, Hannes Frey, Peter Sturm

C023: Enhancing Performance of Distributed Systems with Middle Agents

Yuriy Nevmyvaka, Asim Smailagic and Katia Sycara, Carnegie Mellon University

SELMA: A Middleware Platform for Self-Organizing Distributed Applications in Mobile Multihop Ad-hoc Networks

Hannes Frey, University of Trier

Middleware Support for Sensor-Based Mobile Target Tracking

Xingbo Yu, Koushik Niyogi, Sharad Mehrotra, Nalini Venkatasubramanian, University of California at Irvine