

E-WIND: Workshop on Experimental Approaches to Wireless Network Design and Analysis



ACM SIGCOMM 2005 Workshop

August 22, 2005 - Philadelphia, PA - Loews Hotel

Registration - ACM SIGCOMM 2005 Workshop

Organizing Committee

Call For Papers

Technical Program

Technical Program (pdf)

MONDAY, AUGUST 22, 2005

8:15am Opening Remarks

8:30-10:00am Wireless LAN Measurements

Measurement-based Characterization of 802.11 in a Hotspot Setting

*Maya Rodrig, Charles Reis, Ratul Mahajan, David Wetherall, John Zahorian
University of Washington*

Understanding Link-Layer Behavior in Highly Congested IEEE 802.11b Wireless Networks

*Amit Jardosh, Krishna Ramachandran, Kevin Almeroth, Elizabeth Belding-Royer
University of California, Santa Barbara*

Experimental Evaluation of TCP Performance and Fairness in an 802.11e Test-bed

*Anthony C. H. Ng, David Malone, Douglas Leith
The Hamilton Institute*

Experimental Evaluation of the TCP Simultaneous Send Problem in 802.11 Wireless Local Area Networks

*Sumathi Gopal, Dipankar Raychaudhuri
Rutgers University*

10:00-10:30am Break

10:30-12:00pm Multihop Wireless Measurements

Experimental Investigations into TCP Performance over Wireless Multihop Networks

*Vikas Kawadia, P. R. Kumar
University of Illinois at Urbana-Champaign*

Cooperative Scheduling Via Pipelining in 802.11 Wireless Networks

*Ramana Rao Kompella, Narayanan Ramabhadran, Ishwar Ramani, Alex Snoeren
University of California, San Diego*

Experimental Investigation of PHY Layer Rate Control and Frequency Selection in 802.11-based Ad-Hoc Networks

*Zhibin Wu, Sachin Ganu, Ivan Seskar, Dipankar Raychaudhuri
Rutgers University*

Towards Large-Scale Mobile Network Emulation Through Spatial Switching on a Wireless Grid

*Kishore Ramachandran, Sanjit Kaul, Suhas Mathur, Marco Gruteser, Ivan Seskar
Rutgers University*

12:00-1:00pm Lunch Break

1:00-2:07pm Link and Channel Measurement

Understanding the Real-World Performance of Carrier Sense

*Kyle Jamieson, Bret Hull, Allen Miu, Hari Balakrishnan
Massachusetts Institute of Technology*

A Simple Mechanism for Capturing and Replaying Wireless Channels

*Glenn Judd, Peter Steenkiste
Carnegie Mellon University*

Illinois Wireless Wind Tunnel: A Testbed for Experimental Evaluation of Wireless Networks

*Nitin Vaidya, Jennifer Bernhard, Venugopal Veeravalli, P. R. Kumar, Ravi Iyer
University of Illinois at Urbana-Champaign*

2:07 - 2:30pm Break

2:30-3:37pm Applications

A Prototype on RFID and Sensor Networks for Elder Healthcare

*Loc Ho, Melody Moh, Zacharay Walker, San Jose State University
Takeo Hamada, Ching-Fong Su, Fujitsu Laboratories of America*

Explorebots: Mobile Network Experimentation

*Teresa Dahlberg, University of North Carolina at Charlotte
Asis Nasipuri, University of North Carolina at Charlotte
Craig Taylor, Southwest Research Institute*

Experimental Comparison of Routing and Middleware Solutions for Mobile ad hoc Networks: Legacy vs. Cross-Layer Approach

*Franca Delmastro, Eleonora Borgia, Marco Conti, Enrico Gregori
IIT Institute - CNR Pisa, IT*

3:45-5:00pm Progress and Challenges in Experimental Wireless Networking**

Panel Chair:

Nitin Vaidya, University of Illinois at Urbana-Champaign

Panelists:

Jim Kurose, University of Massachusetts

Jay Lepreau, University of Utah

Dipankar Raychaudhury , Rutgers University

In this interactive response to the workshop, the invited panel will react to the day's presentations and discussions. The panel will present their views and engage the workshop participants in discussion of research accomplishments and future challenges in experimental wireless networking, and identify and discuss in depth specific topics of interest identified by the workshop participants.

****transport to the Turing lecture for 5:30pm arrival will be coordinated**