Plenary Session

Day One Session Chair

Dr. Yeheskel Bar-Ness
Distinguished Professor
Director, CWCSPR
NJIT

Session Speeches

IP/MPLS Network Planning, Design, Simulation, Audit, and Management

Dr. Dave Wang
President
WANDL, Inc
(Wide Area Network Design Lab)

Opportunities and Challenges for Multimedia Communication

Dr. King L. Tai
Chairman of Tech. Advisory Board
SyChip Inc.
A Subsidiary of Murata

Finding Startup Capital

Dr. Ken Kay
Chairman
Jumpstart NJ Angel Network

Day Two Session Chair

Dr. Qi Bi
Bell Laboratories Fellow
Alcatel-Lucent

Session Speeches

Trends in Manufacturing Technology for Handset Power Amplifiers

Dr. Aditya Gupta
Vice President
ANADIGICS, Inc.

Going Out on Your Own – Commercializing Convergent Communications Technologies in a Start-up Environment

Anthony O. Pergola
Vice Chair,
Tech Group
Lowenstein Sandler PC

Adaptive Demodulation Techniques for Next Generation Software Defined Radios

Dr. Wei Su
Senior Research Scientist
US Army Communication Electronics RD&E Center
Poster Sessions

1. **Hasan Mahmood and Cristina Comaniciu**, Stevens Institute of Technology
   *A Cross-Layer Game Theoretic Solution for Interference Mitigation in Wireless Ad Hoc Networks*

2. **Nie Nie and Cristina Comaniciu, Prathima Agrawal**, Auburn University
   *A Game Theoretic Approach to Energy Efficiency in Cognitive Networks*

3. **Si Yin and Nirwan Ansari**, New Jersey Institute of Technology
   *A Novel Approach for Extending Storage Area Network (SAN) over Optical Access Network*

4. **Eric Bi and Justin Bi**, Morristown High School, Morris County, NJ
   *Cell Phone Design for the Youth Generation*

5. **Pan Liu, Yeheskel Bar-Ness**, Broadcom
   *Comparison of Phase Noise Effect in OFDM and Single-Carrier Frequency Domain Equalization (SC-FDE) Systems*

   *Linewidth Enhancement Factor of InAs/InAlGaAs Quantum-dash-in-well Laser*

7. **Di Zheng and Yu-Dong Yao**, Stevens Institute of Technology
   *MAC Protocols for Wireless Sensor Networks*

8. **Zhuo Yang, Didem Kivanc-Tureli, and Uf Tureli**, Stevens Institute of Technology
   *Multiple Antennas Receiver Initiated Busy Tone Medium Access (MARI-BTMA) Protocol in Decentralized Wireless Network*

9. **Seon Woo Lee and Haim Grebel**, New Jersey Institute of Technology
   *Properties of Carbon Nanotube/Conducting Polymer Addressable Interconnects*

10. **Xiaoling Chen and Ufuk Tureli**, Stevens Institute of Technology
    *Source Localization Based on Energy Measurement with Randomly Distributed Sensor Array*

11. **Yun-Hsiang Ding and Vitchanetra Hongpinyo**, Lehigh University
    *Semiconductor Photonic Integration Using Cu-doped SiO$_2$ Induced Intermixing*

12. **Bo Niu, Osvaldo Simeone, and Alex M. Haimovich, Oren Somekh**, New Jersey Institute of Technology
    Princeton University
    *Throughput of Broadcast Channels with Outdated Limited Feedback and User Selection*
WC1:  
Next Generation Wireless Communications I

Session Chair

Dr. Qingqing Zhang
Alcatel-Lucent

Road to High Speed WLAN

Xiaowen Wang
Agere Systems (LSI)

WiMAX : The Path to the Mobile Internet

Shupeng Li
Alcatel-Lucent

Introduction to the New Generation WiFi Technology

Lushen Ji
AT&T Labs - Research

UMTS Long Term Evolution

Fang-Chen Cheng & Lei Song
Alcatel-Lucent

Baseband Algorithms for UMTS Long Term Evolution

Lei Song & Fang-Chen Cheng
Alcatel-Lucent
WC2:
Wireless Fundamental Researches

Session Chair

Dr. Jianghong Luo
Alcatel-Lucent

Recent Advances on Constant and Varying Power Orthogonal Spreading Codes in Radio Communications

Dr. Ali N. Akansu
Prof. ECE Dept.
NJIT

Interference Suppression Techniques for Multiuser MIMO Systems

Xiaodong Wang
Electrical Engineering Dept.
Columbia Univ.

Adaptive Transmission with Variable-Rate Turbo Bit-Interleaved Coded Modulation

Jianghong Luo,
Ruoheng Liu,
Predrag Spasojevi´c
Alcatel-Lucent
Princeton Univ.
Rutgers Univ.

Cooperative Source and Channel Coding For Wireless Multimedia Transmission

Ozgu Alay
Dept of ECE
Polytechnic Univ.
Brooklyn, New York

Mapping Link SNRs of Real-World Wireless Networks onto an Indoor Testbed

Jing Lei, Roy Yates,
Larry Greenstein, Hang Liu
WINLAB, Rutgers University,
Thomson CR, Princeton, New Jersey.
NS1:
New Services & Challenges in a Converged Network

Session Chair
Carlos Urrutia-Valdes
Alcatel-Lucent

Convergence, IMS and Beyond
Carlos Urrutia-Valdes
Alcatel-Lucent

Redefining How People Communicate:
An Overview of Tele-Presence
Franck Noel
Consulting Systems Engineer
Cisco

Operational Challenges of Deploying
Converged Services over IP
Romel Khan
Technical Manager
IDT Corporation

Challenges and Solutions in
Applying Ad hoc and
Sensor Networking
for Public Safety Applications
Liang Cheng
Dept. of Computer Science and Engineering
Lehigh University
Session Chairs

Dr. Yang Guo
Thomson Corporate Research

Dr. Yong Liu
Polytechnic University
Brooklyn, NY

Content Security in P2P Networks
Heather Yu
Huawei Technologies

Efficient Substream Encoding and Transmission for P2P Video on Demand
Zhengye Liu
ECE Dept.
Polytechnic University
Brooklyn, NY

Peer-to-Peer Video Streaming: Successes and Limitations
Yong Liu
Polytechnic University
Brooklyn, NY

QoS Aware Peer-to-Peer Video-on-Demand Service
Dr. Yang Guo
Thomson Corporate Research
WC3:
Mobile Applications (Panel Session)

Session Chair
T. C. Chiang
TC Consulting Group

Converged Networks, Location Based Services, and Mobile Applications
T. C. Chiang
TC Consulting Group

How to Deploy Location-based Services Now and in the Future
Greg Burdett
Andrew Corporation

Location-based (Push) Services – Are we there yet?
Vishy Poosala
Chief Technologist – Geographic Messaging Service
Bell Labs / Alcatel-Lucent Ventures

Automotive Networking and Applications - Opportunities and Challenges
Wai Chen
Telcordia Technologies

Mobile Phone Platforms and Service Enablers
John N. Wong
Senior Consultant
Huawei Technologies
NS2:
Network Reliability

Session Chair
Mohcene Mezhoudi
Alcatel-Lucent

Metrics for Network Resilience and Robustness
Michael Tortorella
Rutgers University

Probabilistic Solution Discovery for Network Reliability Optimization
Jose E. Ramirez-Marquez
Stevens Institute of Technology

Developing Quantitative Reliability Roadmap to Meet Market Expectation
Xuemei Zhang
Alcatel-Lucent

Convergent Communications for the Olympics - Network Reliability Challenges
Spilios E. Makris
Telcordia Technologies
NS3: Migration to NGN and Mobile Broadband

Session Chair

Amit Mukhopadhyay
Bell Labs, Alcatel-Lucent

Wireless – Wireline Convergence

Theodore (Tod) Sizer II
Bell Laboratories / Alcatel-Lucent

Mobile WiMax in Next Generation Networks

Zulfiquar Sayeed
Bell Labs, Alcatel-Lucent

On TCP-Jersey

Dr. Nirwan Ansari
Dept of ECE
New Jersey Institute of Technology

RF Radiation – Environmental Effects

K. Raghunandan
New York City Transit

Network Mobility for IPv4 Private Domain Networks

Harish Viswanathan, Alcatel-Lucent
**MM2: Multimedia Applications**

**Session Chair**

Zhen Wen  
*IBM T. J. Watson Research*

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**Context-aware User Interfaces for Information Seeking**

Zhen Wen  
*IBM T. J. Watson Research*

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**Berkeley-DB for Text/Multimedia Retrieval**

Chun Jin  
*Language Technologies Institute, School of Computer Science, Carnegie Mellon University*

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**Providing Intelligent Conversation Notation Services in Enterprises**

Xiaotao Wu  
*Avaya Labs Research*

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**ViCo: A Large-Scale On-line Video Correlation System**

Xiaohui Gu  
*IBM T. J. Watson Research*
OC2: Optical Communications Technologies

Session Chair

Xiang Liu
Alcatel-Lucent, Bell Laboratories

Technologies, Economics, and Deployment of Optical Access Networks

Kevin W. Lu
Telcordia Technologies, Inc

Optical Technologies for High Capacity Fiber Transmission

Xiang Liu
Alcatel-Lucent, Bell Laboratories

Optical Power Transients and Its Control in a Photonic Network

Xiang Zhou
AT&T Labs-Research

Transient Control in Dynamically Reconfigured Networks With Cascaded Erbium Doped Fiber Amplifiers

Lei Zong
NEC Laboratories America, Inc.