WC4: Wireless IC and SoC Design

Session Chair
Wei Luo
Broadcom Corporation

Advanced Receiver Structures for OFDM-MIMO Detection
Xiao-Feng Qi
Broadcom Corporation

HW and SW Co-verification of Baseband HSPA Processor with Seamless PSP
Zheng Li
Mobility Solution R&D, Alcatel-Lucent

3G Soft Modem Design
Ming-Jye Sheng
Founder, SysAir Inc.

SoC Design and Test Methodologies for Wireless Communications Baseband Processors
Henry Ye
Alcatel-Lucent

Transmitter Amplifiers for Impulse-based UWB System
Renfeng (Laura) Jin
Lehigh University
WC5: Sensor and ad-hoc Networks

Session Chair
Guiling (Grace) Wang
Computer Science Department
New Jersey Institute of Technology

Achieving Confidentiality in Distributed Sensor Data Management
Wensheng Zhang
Iowa State University

Location-Based Security Design for Wireless Sensor Networks
Yanchao Zhang
Dept. of ECE
NJIT

Fault Tolerant Sensor Networks Against Random Node Failures
Yanyong Zhang
WINLAB/Rutgers University

Hybrid Networks: Advancing the Theory and Design of Wireless Networks
Bo Niu, Shengshan Cui, Alexander M. Haimovich
CWCSPR
Dept. of ECE
NJIT

Auction-based Spectrum Sharing for Cognitive Radio Networks
Jianwei Huang
Dept. of Electrical Engineering, ISS Group
Princeton University
NWCC 2007
WIRELESS & OPTICAL COMMUNICATIONS CONFERENCE

NS4:
Network Planning, Design Methods and Tools

Session Chair
Ben Tang
Bell Laboratories, Alcatel-Lucent

Large Network Design
Yung Yu
AT&T Labs

Cross-Technology Planning Platform for Wireless Carriers
Weiping Wang
VPIsystems Inc

A Management Strategy for MPLS-TE Networks
Tony Lin
WANDL, Inc.

Wireless Backhaul Transport Cost Reduction Strategies
Ying Hu,
Mohcène Mezhoudi,
Vijaya Poudyal
Alcatel-Lucent
MM3: Multimedia Indexing and Analysis

Session Chairs

Lexing Xie
IBM T J Watson Research Center

Dynamic Multimodal Fusion for Video Search

Lexing Xie
IBM T J Watson Research Center

Toward a Better Mobile Search Experience

Ning Hu
Google Inc.

Automatic Recognition of Audio-Visual Speech: Recent Progress and Challenges

Stephen M. Chu
IBM T. J. Watson Research Center

Ferret: A Toolkit for Content-Based Similarity Search of Feature-Rich Data

Qin Lv
Princeton University
OC3: Advanced Optoelectronic Components

Session Chair

Jian Jim Wang
NanoOpto Corporation

Observations of Nonlinearities and Non-classical Optics in Photonic Crystals

Chee Wei Wong
Optical Nanostructures Laboratory, Columbia University

Recent Research Activities on Specialty Fibers

Ming-Jun Li
Corning Incorporated

Nanoimprint and Holographic Lithographies for Large-area Nano-optical and Biosensing Applications

Jian Jim Wang
NanoOpto Corporation

Broadband Quantum-Dash Laser: A New Class of Semiconductor Laser

Dahai Xu
Dept. of Electrical Engineering, Princeton University

Optical Seismic Sensor Array Based on Fiber-Bragg-grating Sensors

Yan Zhang, Hong-Liang Cui
Stevens Institute of Technology
Session Chair

Gang Li
Alcatel-Lucent

Behind Mobile WiMAX Technology

Overview of 4G Ultra Mobile Broadband (UMB) Air Interface

Overview of Ultra Mobile Broadband Air Interface Upper Layers Standard

Technical Overview of 3GPP Long Term Evolution (LTE) and 3GPP2 Ultra Mobile Broadband (UMB)

Chenxi Zhu, Ph.D.
Member of Research Staff
Fujitsu Labs of America

Yifei Yuan
Alcatel-Lucent

Jialin Zou
Alcatel-Lucent

Hyung G. Myung
Qualcomm/Flarion Technologies
WS 7: Mobile Networking and Security

Session Chair
Guangying Li
Alcatel-Lucent

Status of IMS-Based Next Generation Networks for Fixed Mobile Convergence
Fuchun Joseph Lin
Chief Scientist
Telcordia Technologies

Attack Detection in Wireless Localization
Yingying (Jennifer) Chen
Rutgers University & Alcatel-Lucent

Mobile Digital Forensics
Yun Q. Shi
New Jersey Institute of Technology

Wireless Security Threats and countermeasures
Yih-Chen S (Steve) Wang
Alcatel-Lucent
NS5:
Emerging and Innovative Technologies

Session Chair
Dong Sun
Bell Laboratories, Alcatel-Lucent

Convergence of Policy based Resource Management Framework in Next Generation Networks
Dong Sun
Bell Laboratories, Alcatel-Lucent

Enhancing the Internet Survivability using IP Fast Rerouting
Kang Xi
Dept. of ECE
Polytechnic University
Brooklyn, NY

Ferry-based Intrusion Detection and Mitigation Schemes for Sparsely Connected Adhoc Networks
Dr. Mooi Choo Chuah
Lehigh University

A New Radio Channel Allocation Strategy for APs of WLANs with Power Control
Ming Yu
Dept. of Electrical and Computer Engineering
Florida State University
MM4:
Multimedia Content Analysis and Delivery

Session Chair
Rong Duan
AT&T Lab

Semi-supervised Learning in Image Classification
Rong Duan
AT&T Lab

Robust Adjusted Likelihood Function in Classification
Hong Man
Stevens Institute of Technology

IGP Weight Setting in Multimedia IP Networks
Dongmei Wang
AT&T Labs - Research

WebTalk: Towards Automatically Building Interactive Systems Through Mining Websites
Junlan Feng
AT&T Labs Research

Video Coding Using 3-D Dual-tree Wavelet Transform
Beibei Wang
ECE Dept.
Polytechnic University
Brooklyn, NY
OC4: Optical Communication Components and Subsystems

Session Chair

Deyu Zhou
Opnext, Inc.

High Bit Rate Optical Data Bus Technologies for Advanced Wireless Handheld Devices

Louay Eldada
DuPont Photonics Technologies

Transitions from R&D to Product Realization — Opportunities and Challenges for Optical Component Industries

Deyu Zhou
Opnext, Inc.

Nonlinear Silicon Photonics and Its Application in On-chip Optical Interconnection Networks

Xiaogang Chen
Columbia University

Radio-Frequency Characteristics of Ultraviolet Optical Links

Jie Deng
Electrical and Engineering Dept. Lehigh University