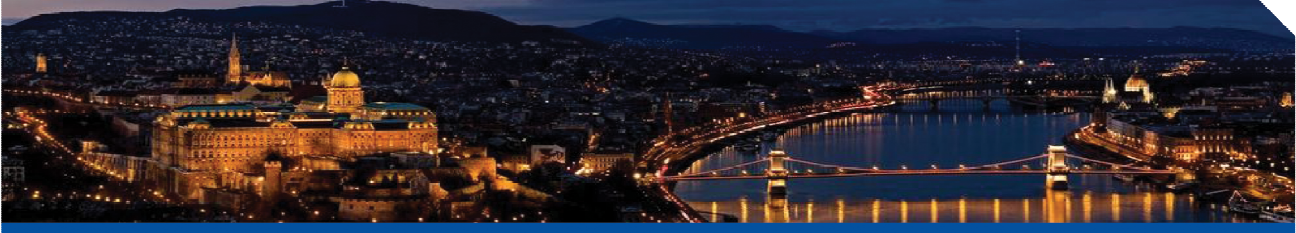




Bridging the Broadband Divide
9-13 June • Budapest, Hungary

IEEE IEEE COMMUNICATIONS SOCIETY
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Cognitive Radio and Networks Symposium

Symposium Co-Chairs:

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The 2013 IEEE International Conference on Communications (ICC) will be held in the vibrant city of Budapest, Hungary from 9 – 13 June 2013. This flagship conference of IEEE Communications Society aims at addressing an essential theme on “Bridging the Broadband Divide.” The conference will feature a comprehensive technical program including several Symposia and a number of Tutorials and Workshops. IEEE ICC 2013 will also include an attractive expo program including keynote speakers, various Business, Technology and Industry forum, and vendor exhibits. We invite you to submit your original technical papers, industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2013 Conference Proceedings and in IEEE Xplore®. Full details of submission procedures are available at <http://www.ieee-icc.org/2013>.

Scope and Topics of Interest

The Cognitive Radio and Networks Symposium will focus on the emerging cognitive radio communications and networking technologies, which aim at mitigating the spectrum underutilization problem in wireless accessing networks, improving the interoperability and coexistence among different wireless/mobile communications systems, and making the future generation radio devices/systems autonomous and self-reconfigurable. The goal of this symposium is to bring together and disseminate the state-of-the-art research contributions that address the various aspects of analysis, optimization, design, implementation, and application of cognitive radio communications and networking technologies.

To ensure complete coverage of the advances in the cognitive radio communications and networking technologies, this Symposium presents original contributions in, but not limited to, the following topical areas:

- Spectrum sensing, measurements and statistical modeling of spectrum usage
- Waveform design, modulation, interference aggregation, mitigation for cognitive radio
- Distributed cooperative spectrum sensing and multiuser access
- Cognitive medium access control, interference management, handoff and routing protocols
- Resource allocation for multiple-input multiple-output (MIMO)-based cognitive radio communications
- Distributed adaptation and optimization methods
- Cross-layer optimization of cognitive radio systems
- Challenges and issues in designing cognitive radios and networks
- Architectures and building blocks of cognitive radio networks
- Energy-efficient environment-friendly cognitive radio communications and networking (green cognitive radio)
- Cognitive intelligent techniques (e.g., machine learning, transfer learning, information-theoretic learning, bio-inspired intelligence)

- Self-configuration, interoperability and co-existence issues
- Dynamic spectrum accessing and sharing in unlicensed bands
- Security and robustness of cognitive spectrum-agile networks
- Applications and services based on cognitive radio networks (e.g., cognitive networking in TV whitespace, cognitive femtocell networks, public safety networks, and vehicular networks)
- Economic aspects of spectrum sharing (e.g., pricing, auction) in cognitive radio networks
- Regulatory policies and their interactions with communications and networking
- Cognitive radio standards, test-beds, simulation tools, and hardware prototypes

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline **16 September 2012** for publication in the IEEE ICC 2013 Conference Proceedings and for oral or poster presentation(s).

All submissions should be written in English with a maximum paper length of Five (5) printed pages (10-point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).

Standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at
<http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html>

Alternatively you can follow the sample instructions in template.pdf at
<http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf>

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at
<http://edas.info/>

Short biography of Co-Chairs

Honggang Zhang is a Full Professor and a Co-Director of York-Zhejiang Lab for Cognitive Radio and Green Communications at the Zhejiang University, China. He is an Honorary Visiting Professor of the University of York, UK. He received the Ph.D. degree in Electrical Engineering from Kagoshima University, Japan, in March 1999. From October 1999 to March 2002, he was with the Telecommunications Advancement Organization (TAO) of Japan. From April 2002 to November 2002, he joined the TOYOTA IT Center. From December 2002 to August 2004, he has been with the Communications Research Laboratory (CRL) and National Institute of Information and Communications Technology (NICT) of Japan. From September 2004 to February 2008, he has been with CREATE-NET (Italy). Dr. Honggang Zhang serves as the Chair of the Technical Committee on Cognitive Networks (TCCN) of the IEEE Communications Society (ComSoc). He was the Co-Chairs of IEEE Globecom 2008 Symposium. He was the founding TPC Co-Chairs of CrownCom 2006 as well as the Steering Committee Member of CrownCom 2006-2009. In the area of green communications, Dr. Honggang Zhang was the Lead Guest Editor of the IEEE Communications Magazine special issues on "Green Communications". He was the General Chair of IEEE/ACM GreenCom 2010 (2010 IEEE/ACM International Conference on Green Computing and Communications). He is the co-author/editor of the book "Green Communications: Theoretical Fundamentals, Algorithms and Applications" (CRC Press).

David Grace is Head of Communications Research Group and Senior Research Fellow within the Department of Electronics at the University of York, UK. He is also a Co-Director of the York-Zhejiang Lab on Cognitive Radio and Green Communications, and a Guest Professor at Zhejiang University. He received his PhD from University of York in 1999. Current research interests include cognitive green radio, particularly applying distributed artificial intelligence to resource and topology management to improve overall energy efficiency; architectures for beyond 4G wireless networks; dynamic spectrum access and interference management. He is a co-investigator of the FP7 BuNGee project dealing with broadband next generation access, and recently he was the principal investigator of a UK MOD project on "Cognitive Routing for Tactical Ad Hoc Networks". From 2003-2007 he was the technical lead for the 14-partner FP6 CAPANINA project. He is an author of over 160 papers, and author/editor of 2 books. He currently chairs the Worldwide Universities Network Cognitive Communications Consortium (WUN CogCom), which has members from 90+ organizations worldwide, and is a member of COST IC0902. He is the WUN CogCom Liaison Chair for IEEE Committee on Cognitive Networks, and is a founding member of the new IEEE Technical Sub-Committee on Green Communications and Computing (GCC). From 2005-2009 he was COST 297 WG1 chair which dealt with radio communications for high altitude platforms.

Andrea Giorgetti received the Dr. Ing. degree (magna cum laude) in electronic engineering and the Ph.D. degree in electronic engineering and computer science from the University of Bologna, Italy, in 1999 and 2003, respectively. Since 2003, he has been with the Istituto di Elettronica e di Ingegneria dell'Informazione e delle Telecomunicazioni (IEIIT-BO) research unit, National Research Council (CNR), Bologna. In 2005, he was a Researcher with the National Research Council. Since 2006 he has been an Assistant Professor with the II Engineering Faculty, University of Bologna, where he joined the Department of Electronics, Computer Sciences and Systems. During the spring of 2006, he was a Research Affiliate with the Laboratory for Information and Decision Systems, Massachusetts Institute of Technology, Cambridge, working on coexistence issues between Ultra-wideband and narrow-band wireless systems. His research interests include Ultra-wideband communication systems, wireless sensor networks, and multiple-antenna systems. He was Co-Chair of the Wireless Networking Symposium at the IEEE ICC 2008 and Co-Chair of the MAC track of the 2009 IEEE Wireless Communications and Networking Conference (WCNC 2009).