IEEE International Conference on Communications
IEEE ICC 2014
Communications: The Centrepoint of the Digital Economy
10-14 June 2014, Sydney, Australia

Cognitive Radio and Networks Symposium

Symposium Co-Chairs

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The 2014 IEEE International Conference on Communications (ICC) will be held in the beautiful city of Sydney, Australia between 10 and 14 June 2014. The theme of this flagship conference of IEEE Communications Society for 2014 is "*Communications: The Centrepoint of the Digital Economy*." The conference will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2014 will also include an attractive expo program including keynote speakers, and Industry Forum & Exhibitions (IF&E). 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 2014 Conference Proceedings and in IEEE Xplore®. Full details of submission procedures are available at http://www.ieee-icc.org/2014.

Scope and Topics of Interest

The Cognitive Radio and Networks (CRN) 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/wired & 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 this field, the Cognitive Radio and Networks Symposium solicits original contributions in, but not limited to, the following topical areas:

- Spectrum sensing, measurements and statistical modeling of spectrum usage
- Distributed cooperative spectrum sensing and multiuser access
- Dynamic spectrum accessing and sharing in unlicensed bands
- Waveform design, modulation, interference aggregation and mitigation

for cognitive radio networks

- Cognitive medium access control (MAC), interference management, handoff and routing protocols
- Resource allocation for multiple-input multiple-output (MIMO)-based cognitive radio communications
- Distributed adaptation and optimization methods for cognitive radio networks
- Cross-layer optimization of cognitive radio networks
- Ranging and localization in cognitive radio networks
- Radio environment mapping for cognitive radio 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
- 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 & small cell networks, public safety networks, and vehicular networks)
- Cognitive radio standards, test-beds, simulation tools, hardware prototypes and implementation
- Regulatory policies and their interactions with communications and networking
- Economic aspects of spectrum sharing (e.g., pricing, auction) in cognitive radio networks
- Other challenges and issues in designing cognitive radios and networks

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 15 September 2013 for publication in the IEEE ICC 2014 Conference Proceedings and for oral or poster presentation(s). All submissions should be written in English with a maximum paper length of Six (6) 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/Conference 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/

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Brief Bio

Jacques Palicot received, in 1983, his PhD degree in Signal Processing from the University of Rennes. Since 1988, he has been involved in studies about equalization techniques applied to digital transmissions and new analog TV systems. Since 1991 he has been involved mainly in studies concerning the digital communications area and automatic measurements techniques. Prof. Palicot has taken an active part in various international bodies EBU, CCIR, URSI, and within RACE, ACTS and IST European projects. He has published various scientific articles notably on equalization techniques, echo cancellation, hierarchical modulations and Software Radio techniques. He is currently involved in adaptive Signal Processing and in new techniques as Software Radio, Cognitive radio and Green Radio. From November 2001 to September 2003 he had a temporary position with INRIA/IRISA in Rennes. He serves as Associate Editor for EURASIP JASP since 2008. He also served as lead guest editor several Special Issues on Software Radio, Cognitive Radio and Green Radio. He was Technical Program Chairman of CROWNCOM 2099 and Co General Chairman of ISCIT 2011. Since October 2003 he is with Supélec in Rennes where he leads the Signal Communications and Embedded Electronics (SCEE) research team.

Prof. Jaime Lloret (jlloret@dcom.upv.es) received his M.Sc. in Physics in 1997, his M.Sc. in electronic Engineering in 2003 and his Ph.D. in telecommunication engineering (Dr. Ing.) in 2006. He is a Cisco Certified Network Professional Instructor. He worked as a network designer and administrator in several enterprises. He is currently Associate Professor in the Polytechnic University of Valencia. He is the head of the research group "communications and remote sensing" of the Integrated Management Coastal Research Institute and he is the head of the "Active and collaborative techniques and use of technologic resources in the education (EITACURTE)" Innovation Group. He is the director of the University Expert Certificate "Redes y Comunicaciones de Ordenadores", the University Expert Certificate "Tecnologías Web y Comercio Electrónico", and the University Master "Digital Post Production". He is currently Vice-chair of the Internet Technical Committee (IEEE Communications Society and Internet society). He has authored 12 books and has more than 220 research papers published in national and international conferences, international journals (more than 50 with ISI Thomson Impact Factor). He has been the co-editor of 15 conference proceedings and guest editor of several international books and journals. He is editor-in-chief of the international journal "Networks Protocols and Algorithms", IARIA Journals Board Chair (8 Journals) and he is associate editor of several international journals. He has been involved in more than 160 Program committees of international conferences and in many organization and steering committees. He led many national and international projects. He is

currently the chair of the Working Group for the Standard IEEE 1907.1. He has been the general chair (or co-chair) of 13 International conferences. He is IEEE Senior and IARIA Fellow.

Lin Cai received her M.A.Sc. and PhD degrees in electrical and computer engineering from the University of Waterloo, Ontario, Canada, in 2005 and 2010, respectively. She was working as a postdoctoral research fellow in electrical engineering department at Princeton University in 2011. Currently, she is a senior engineer in US wireless R&D center in Huawei Technologies Inc. Her research interests include green communication and networking, resource management for broadband multimedia networks, and cross-layer optimization and QoS provisioning.