



CALL FOR PAPERS

COGNITIVE RADIO AND NETWORKS SYMPOSIUM

Symposium Co-Chairs

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Scope and Topics of Interest

The Cognitive Radio and Networks Symposium will focus on emerging cognitive radio communications and networking technologies that aim at mitigating the spectrum underutilization problem in wireless access networks, improving the interoperability and coexistence among different wireless/mobile communications systems, and making future-generation radio systems autonomous and reconfigurable. The goal of this symposium is to bring together and disseminate the state-of-the-art research contributions that address various aspects of analysis, optimization, design, implementation, and application of cognitive radio communications and networking technologies. To ensure complete coverage of recent advances in the cognitive radio communications and networking technologies, this Symposium solicits original contributions in, but not limited to, the following topical areas:

- Spectrum sensing, measurements and statistical modeling of spectrum usage
- Cooperative and distributed spectrum sensing
- Waveform design and modulation for interference mitigation in cognitive radio
- Aggregate interference and coexistence issues
- 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 for cognitive radio networks
- Cross-layer optimization of cognitive radio systems
- Ranging and localization in cognitive radio networks
- Radio environment mapping for cognitive radio networks
- Architectures for 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 coexistence issues
- Dynamic spectrum accessing and sharing in unlicensed bands
- Security and robustness of cognitive spectrum-agile networks

- Regulatory policies and their interactions with communications and networking
- Cognitive radio standards, test-beds, simulation tools, and hardware prototypes
- 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

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline of **15 March 2013** for publication in the IEEE Globecom 2013 Conference Proceedings and for presentation at the conference. Submissions will be accepted through EDAS. All submissions must be written in English and be at most six (6) printed pages in length, including figures. For full details, please visit the following website:

<http://www.ieee-globecom.org/2013/submguide.html>