

Call for Papers

CROWNCOM 2019 - 14th EAI International Conference on Cognitive Radio Oriented Wireless Networks

“Artificial Intelligence for 5G and beyond”

11 – 13 June 2019

Poznan, Poland

Scope

The aim of CROWNCOM 2019 is to bring together researchers and experts from academia, industry, standards, and policy to present their new solutions of how cognitive radio systems will help deliver the required stringent requirements of future 5G and beyond 5G networks. Following the success of last edition, the main scope of this event is on new application domains for the cognitive-based solutions in the context of 5G and beyond. In particular we will concentrate on science and industry drivers such as machine learning and big data analysis in future wireless networks.

Various aspects originated from Cognitive Radio domain, such as dynamic spectrum access, increased system flexibility through access to rich context information, spectrum sharing, virtualization and management, have been considered for application in various context. The emergence of 5G raised unprecedented expectations in terms of broadband services, latency and convergence of broadband systems with IoT networks. In this context, CROWNCOM 2019 will encompass a large scope of research topic also covering IoT in 5G and how cognitive mechanisms shall help leveraging access for billions of devices ; mmWave and how specific propagation and operation in these bands bring new sharing mechanisms ; how resource allocation amongst bands (including offload mechanisms) shall be solved. The key focus will be on how can rich data analysis improve the delivery of above defined services.

CROWNCOM 2019 invites you to submit your research results and position papers on the following topics of interest, but not limited to:

Topics

- *Machine learning algorithms and solutions for 5G and beyond*
- *Usage of Context Information in future wireless system*
- *Spectrum and resource virtualization*
- *Spectrum, infrastructure and resource management in future wireless networks*
- *New applications of cognitive radio based technologies in future wireless networks*
- *Deep learning and data mining in wireless networks*
- *Spectrum sharing and cognitive networks, including DSA, LSA, LAA, CBRS-SAS*
- *Coexistence in unlicensed bands (including offload mechanisms)*
- *Cognitive Radio Related Standards and initiatives*
- *Spectrum efficiency optimisation at any layer level perspective (at PHY, MAC, networking and application level)*
- *Radio resource slicing and radio virtualization techniques*
- *Spectrum for digital inclusion*
- *Application of cognitive radio and sharing for the IoT*
- *Cognitive radio technology for V2V and V2X applications*

- *Sharing and coexistence in mmWave bands and satellite communications*
- *Experimental results on spectrum efficiency of end-to-end wireless systems and trials*
- *Spectrum sharing and security*
- *Business aspects and new opportunities related to spectrum sharing models and deployments*
- *Fundamentals of cognitive radio, e.g., advances in spectrum sensing, dynamic spectrum access*

Publication

- Proceedings will be submitted for publication by *Springer*
- Proceedings will be submitted for inclusion in leading indexing services, including EI Elsevier Engineering Index, Thomson Scientific ISI Proceedings, Scopus, CrossRef, Google Scholar, DBLP, as well as EAI's own EU Digital Library (EUDL).
- Authors of selected papers will be invited to submit extended versions of their accepted papers to the special issue on „New application domains for the cognitive-based solutions in the context of 5G and beyond“ in EURASIP Journal on Wireless Communications and Networking
- Moreover, selected papers will be invited for publication in the following EAI Endorsed Transactions: EAI Endorsed Transactions on Cognitive Communications and EAI Wireless Spectrum

Submission

EAI provides Confy submission system. Papers should be up to 14 pages long with reference, and have to comply with the Springer format (see [Author's kit section](#)).

Deadlines

Suggest deadlines:

- **Submission Deadline: 29th January 2019**
- **Notification Deadline: 12th March 2019**
- **Camera-ready Deadline: 12th April 2019**