COCORA 2017

Forward

The Seventh International Conference on Advances in Cognitive Radio (COCORA 2017), held between April 23-27, 2017 in Venice, Italy, followed the previous editions dealing with various aspects, advanced solutions and challenges in cognitive (and collaborative) radio networks. It covers fundamentals on cognitive and collaborative radio, specific mechanism and protocols, signal processing (including software defined radio) and dedicated devices, measurements and applications.

Most of the national and cross-national boards (FCC, European Commission) had/have a series of activities in the technical, economic, and regulatory domains in searching for better spectrum management policies and techniques, due to spectrum scarcity and spectrum underutilization issues. Therefore, dynamic spectrum management via cognition capability can make opportunistic spectrum access possible (either by knowledge management mechanisms or by spectrum sensing functionality). The main challenge for a cognitive radio is to detect the existence of primary users reliably in order to minimize the interference to licensed communications. Optimized collaborative spectrum sensing schemes give better spectrum sensing performance. Effects as hidden node, shadowing, fading lead to uncertainties in a channel; collaboration has been proposed as a solution. However, traffic overhead and other management aspects require enhanced collaboration techniques and mechanisms for a more realistic cognitive radio networking

The conference had the following tracks:

- Cognitive radio and emerging technologies
- 5GSPECTRUM: Advanced Spectrum Management in 5G and Beyond Systems
- MEC&mmW: Mobile Edge Computing and Millimeter Waves as Key Technology Enablers

We take here the opportunity to warmly thank all the members of the COCORA 2017 technical program committee, as well as all the reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and effort to contribute to COCORA 2017. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We also gratefully thank the members of the COCORA 2017 organizing committee for their help in handling the logistics and for their work that made this professional meeting a success.

We hope that COCORA 2017 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the field of cognitive radio. We also hope that Venice, Italy provided a pleasant environment during the conference and everyone saved some time to enjoy the unique charm of the city.

COCORA 2017 Committee