

Call for Contributions

Inform the Chair: with the Title of your Contribution

Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=SIGNAL+2017+Special>

Please select Track Preference as **5GSIGWAVE**

Special track

5GSIGWAVE: Signal Processing for Decentralized, Cognitive and Self-organised 5G Wireless Access Networks

Chair and Coordinator

Dr. Ramiro Sámano Robles, CISTER Research Centre, ISEP - Instituto Superior de Engenharia do Porto –
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along with

SIGNAL 2017, May 21 - 25, 2017 - Barcelona, Spain

The Second International Conference on Advances in Signal, Image and Video Processing
- from Sensing to Applications –

<http://www.iaria.org/conferences2017/SIGNAL17.html>

The number of wireless connections is growing exponentially around the globe. It is expected that up to 50 billion devices will be connected to the net by 2050. Most of these connections will involve wireless technologies. However, with current wireless standards it will be impossible to cope with this increase in traffic demand and different quality of service requirements. In addition, the signalling load needed for resource allocation and device coordination in such massive deployment will become prohibitively large. 5G wireless access networks will need to combine several innovative aspects of decentralized and centralized allocation looking for maximizing performance and minimizing signalling load.

Spectrum resources need to be dynamically shared using advanced cognitive radios and self-organization that will enable the maximum exploitation of opportunities with minimized interference and maximum quality of service satisfaction. Centralized architectures with cloud computing, context-aware, and big data processing will enable large and dense network deployments with high interference rejection, embedded security, and energy savings. Signal processing will be of paramount importance in future 5G networks to make efficient use of resources, resolve conflicts, reduce signalling load, improve transfer of information, improve security, make efficient use of energy consumption, reject interference, and enable efficient detection of spectrum opportunities.

Contributing papers are suggested to cover one or more (but not limited to) of the following sub-topics:

- Multiple antenna processing
- Signal processing for contention resolution algorithms
- Orbital angular momentum processing
- Full duplex algorithms
- Device-to-device signal processing
- 3D beamforming
- Sparse signal processing
- Massive MIMO,
- Full-dimension MIMO
- Large scale cooperative processing
- Innovative modulation formats and encoding
- MAC-PHY cross-layer design for 5G access

- Error correction protocols
- mm-wave design, spectrum sharing
- Energy harvesting for 5G
- Coordinated distributed antenna processing,
- Interference alignment
- Cooperative relaying diversity
- Adaptive beamforming
- Space division multiplexing
- Multi-packet reception with interference cancellation
- Cognitive radio resource allocation
- Self-organized resource allocation
- Multi-hop ad-hoc processing
- Blind and semi blind algorithms for multiuser detection and contention resolution
- Decentralized contention resolution protocols for 5G futures wireless networks
- Signal processing for cloud radio access network
- Software defined networking processing
- Ultra-dense networks
- Full duplex algorithms
- Non-orthogonal multiple access
- Error correction and channel coding for 5G
- PHY-layer for low latency
- Embedded security
- Filter bank multi carrier
- Spectral-efficient FDM systems
- Generalized FDM
- Channel modelling issues
- Multi-objective optimization for signal processing in 5G
- Game theory for self-organized and cognitive radio 5G networks
- Low latency solutions for machine-type communications

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: February 28
- Notification with comments for camera-ready: March 15
- Registration: April 2
- Camera ready: April 9

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]

- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaia.org]
- Presentations: slide only [slide-deck posted on www.iaia.org]
- Demos: two pages [posted on www.iaia.org]

Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=SIGNAL+2017+Special>
Please select Track Preference as **5GSIGWAVE**

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

Contact

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First International Workshop on “IoT and Antenna Design” (IoTAD)
(Co-located with the Sixth International Conference on Future Generation Communication Technologies
Irish Computer Society, Dublin
Ireland
August 21-23, 2017
(www.socio.org.uk/fgct)

Antennas have high impact in the radio frequency. Antennas are frequently deployed in major applications that include many such as mobile phones, satellite communications, garage-door openers and so on. Recently the antennas are able to connect less-obvious devices due to the Internet of Things. The connections emerge wireless, untethered to any cable. Thus antennas have profound applications both at macro and micro levels, visible as well as hidden, more obvious as well as less-obvious. The recent ultra-wideband (UWB) technology, printed slot antennas etc., have impact in the UWB communication systems. Antenna designs now go beyond normal way and able to connect many unconnected devices. Thus the proposed workshop can able to address the new applications and design views.

The workshop will discuss the themes not limited to-

- Bandwidth, Optimization
- Impedance
- Ultra wideband antennas
- Algorithm design and analysis
- Slot antennas
- Broadband antennas
- Microstrip antennas
- Ultra wideband antennas
- Ultra wideband technology
- Wireless LAN Feeds
- Dielectric resonator antennas
- Ultra wideband technology
- Bandwidth, Resonance
- Resonant frequency
- Loaded antennas
- Permittivity
- Dipole antennas
- Antenna radiation patterns

Important Dates

Submission of Papers : May 25, 2017
Notification of Acceptance: July 01, 2017
Camera Ready : August 01, 2017
Registration : August 01, 2017
Conference Dates : August 21-23, 2017

The selected papers after extension and modification will be published in many peer reviewed and indexed journals.

Workshop Chairs

Ricardo Rodriguez Jorge
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C.P. 32310
Mexico

Submissions at <http://www.socio.org.uk/fgct/paper-submission/>
Contact: fgct at socio.org.uk

Deep Learning Applications
(Co-located with the Seventh International Conference on Innovative Computing Technology (INTECH 2017))
Luton, UK
August 16-18, 2017
(www.dirf.org/intech)

Deep Learning (DL) is an important component of computational intelligence which has the core domain machine learning research in it. It provides more efficient algorithms to deal with large-scale data in neuroscience, computer vision, speech recognition, language processing, biomedical informatics, recommender systems, learning theory, robotics, games, and so on. DL is gaining applications in many domains due to the availability of large amount of data coupled with machine learning algorithms. As the DL applications are on increasing trend a workshop on it will enable to identify the emerging trends in the domain.

The proposed workshop will address the below listed but not limited themes.

- Neural network architectures
- DL Applications to the Natural Sciences
- Visual Perception using Deep Convolutional Neural Networks
- Deep Learning for Computer Vision
- Deep Sequence Modeling: Historical Perspective and Current Trends
- Automatic Terminology Extraction
- Deep Learning of Behaviors
- Probabilistic Graphical Models Algorithms
- Deep Learning for Natural Language Processing
- Deep Learning Applications at the Enterprise Scale
- Multi-modal Deep Learning
- Deep Learning Security
- Neural Networks
- From Statistical Decision Theory and Deep Neural Networks
- Machine Learning and Deep Neural Networks
- Cognitive Architectures for Object Recognition in Video
- Learning Representations for Vision, Speech and Text Processing Applications
- Deep Learning in the Brain
- Deep Learning for Sequences
- Interpretable Deep Learning Models for Healthcare Applications
- Deep Learning for Video Games
- Data Processing Methods, and Applications of Least Squares Support Vector Machines
- Deep Generative Models and Unsupervised Learning
- Natural Language Understanding

Submissions

Submissions should provide original and unpublished research results or ongoing research with simulations. The papers should be between 6 to 8 pages total in length in the IEEE format.

- * All the accepted papers will appear in the proceedings published by IEEE and fully indexed by IEEE Xplore.
- * Modified version of the selected papers will appear in the special issues of many peer reviewed and indexed journals.

Important Dates

Submission of papers : June 01, 2017
Notification of Acceptance/Rejection: July 01, 2017
Camera Ready : August 01, 2017
Registration : August 01, 2017
Conference : August 16-18, 2017

Organizers

Ricardo Rodriguez Jorge, Engineering and Technology Institute, Mexico
Submissions at-<http://www.dirf.org/intech/paper-submission/>
Contact- intech@dirf.org
