IEEE IDAACS-SWS 2020

5th IEEE INTERNATIONAL SYMPOSIUM ON SMART AND WIRELESS SYSTEMS

within the

International Conferences on Intelligent Data Acquisition and Advanced Computing Systems

17-18 September 2020, Dortmund University of Applied Sciences and Arts

Call for Papers

The symposium explores wireless systems and their applications. The aim of the Symposium is to exchange experience and enhance scientific collaboration. In particular, papers focusing on novel developments in wireless radio technologies, wireless network architectures, advanced IoT applications and services and **smart wireless systems** will be welcomed.

The symposium is organized within the family of **IDAACS conferences** (www.idaacs.net). Success of special streams led to their promotion to symposia, which were held in 2012, 2014, 2016 in Offenburg (Germany) and 2018 in Lviv (Ukraine). Papers published in previous IDAACS-SWS symposia were published in IEEE Xplore, Web of Science – Conference Proceedings Citation Index-Science (CPCI-S) and Scopus.
The new venue **Dortmund** is located in the Ruhr valley in Germany with several research institutions like Dortmund Technical University, Dortmund University of Applied Sciences and Arts, Max-Planck-Institute, Fraunhofer-Institute and aside of that the well-known football club Borussia Dortmund. Therefore, we hope the symposium will take a successful and interesting course.

Topics:

Wireless Radio Technologies:

- modulation, coding, diversity
- information-theoretic aspects of wireless communications
- interference characterization and avoidance
- cognitive radio, multi user detection
- ultra-wide bandwidth communication
- wireless MAC protocols: design, capacity and analysis;
- security and safety with wireless systems
- localization for wireless networks
- antenna design and simulation
- ultra low power designs, incl. energy harvesting
- commissioning, analysing and monitoring of distributed wireless networks
- standardization & harmonization
- RFID & NFC
- new development for LTE, 5G, NB-IOT IEEE802.15.4 & ZigBee
- DECT & DECT ULE
- IPv6 for Wireless, 6LoWPAN
- Bluetooth
- narrowband long range technologies, like SigFox, Weightless, LoRa, LoRaWAN

Wireless Network Architectures:

- proxies and middleware for wireless networks
- QoS support, middleware
- innovative user interfaces, peer-to-peer services for multimedia
- AAA, application-oriented network management
- monitoring, intrusion detection and intrusion prevention
- personalization, service discovery, profiles and profiling

Advanced IoT Applications and Services:

- emerging wireless/mobile applications
- multimedia & SIP based service
- context and location-aware wireless services and applications
- wireless for telemedicine, and e-health services
- wireless for intelligent transportation systems (ITS)
- including Car-2-Car- and Car-2-X communication
- integration of sensor-actuator-networks into cloud-based services
- industrial applications (Industry 4.0)
- wireless for machine-to-machine (M2M) applications
- wireless for emergency and security systems
- business process for wireless applications and services
- business models for wireless applications and services

Smart Wireless Systems:

- wireless for smart city applications
- wireless for smart home and smart building applications
- wireless for smart meter and smart grid applications
- wireless for future and digital cities
- wireless city networks
- ambient assisted living (AAL)
- mobility monitoring and control in smart environments
- use cases for smart homes and smart cities
- sociocultural challenges in smart environments
- smart information processing and smart analytics
- security aspects of smart and wireless systems

Sponsors:

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Deadlines:

Extended Abstract submission (3 – 4 pages): May 31st, 2020 and **Notification**: June 30th, 2020.
Camera Ready Paper submission (4 – 6 pages): July 31st, 2020

Submission:

Participants are invited to submit an **Extended Abstract** (3 – 4 pages) using the online system. Each submission should present clearly the novelty and significance of the contribution, a list of references, and any figures or tables.
For additional information about **submission requirements and paper preparation** please visit **www.idaacs.net/2020.**

Conference language:

The official conference language is English. No simultaneous translation will be provided. All materials concerning the IDAACS-SWS 2020 should be written in English.

Contact us:

If you have any question please contact us via **idaacs-sws2020@fh-dortmund.de.**
More information about our conference you can find on our website **www.idaacs.net/2020.**

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