

20th Euromicro Conference on Digital System Design

Vienna, Austria, Aug. 30th - Sept. 1st, 2017

Call for Papers



SPECIAL SESSION ON ADVANCED SYSTEMS FOR HEALTH, WELLNESS AND PERSONAL ASSISTANCE (ASHWPA)

SPECIAL SESSION SCOPE

This Special Session (SS) aims at discussing recent advances in development of embedded and cyber-physical systems for health care, wellness monitoring and personal assistance for any kind of persons, either suffering from a disease or not. The recent progress in (intelligent) miniaturized sensors and actuators, powerful embedded processors, wireless communications and energy efficient design made feasible and economically justified numerous new systems that are able to not only acquire bio-medical signals, but also to perform complex processing and classifications of bio-medical information, and related decision making, often allowing a remote monitoring or interaction with medical personnel. This enables new or better systems not only in the traditional fields like medicine and surgery, but also in those related to ageing population or to personal well-being.

This SS focuses both on the design and implementation methodologies and technologies, as well as, the advanced applications and holistic development of systems from the concept to its actual realisation and validation. Consequently, contributions from both industry and academia are welcome. Considerations of multi-disciplinary aspects implicitly included in the design of such systems are of special interest.

Please find below a not exhaustive list of topics to be covered by this session:

- cyber-physical systems for healthcare, well-being and personal (elderly, disability ...) assistance
- body-area networks, wearables, implantables and pill-size devices
- HWPA applications and internet-of things
- sport s and medicine devices
- rehabilitation equipment
- system ergonomy and human-machine interfaces
- RT biomedical signal and image processing,
- biomedical instrumentation,
- lab-on-chip
- neuromorphic chips
- design, implementation and validation technologies, methods and tools for HPWA systems

SUBMISSION GUIDELINES

Authors are encouraged to submit their manuscripts to https://easychair.org/conferences/?conf=dsd2017. Should an unexpected web access problem be encountered, please contact the Program Chair by email (dsd2017@easychair.org).

Each manuscript should include the complete paper text, all illustrations, and references. The manuscript should conform to the IEEE format: single-spaced, double column, US letter page size, 10-point size Times Roman font, up to 8 pages. In order to conduct a blind review, <u>no indication of the authors' names should appear in the manuscript, references included</u>.

IMPORTANT DATES

Deadline for paper submission: April 15th Notification of acceptance: June 10th Camera ready papers: July 1st

MORE INFORMATION (WEB PAGES)

- DSD 2017: http://dsd-seaa2017.ocg.at
- Euromicro: <u>www.euromicro.org</u>

DSD 2017

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