



# DSD 2018

21<sup>th</sup> Euromicro Conference on Digital System Design  
Prague, Czech Republic, Aug. 29<sup>th</sup> - 31<sup>st</sup>, 2018

## 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
- HWPWA applications and internet-of things
- sport s and medicine devices
- rehabilitation equipment
- system ergonomics 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=dsd2018>. Should an unexpected web access problem be encountered, please contact the Program Chair by email ([dsd2018@easychair.org](mailto:dsd2018@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, no indication of the authors' names should appear in the manuscript, references included.

#### IMPORTANT DATES

**Deadline for paper submission: April 15<sup>th</sup>**  
**Notification of acceptance: May 15<sup>th</sup>**  
**Camera ready papers: July 15<sup>th</sup>**

#### MORE INFORMATION (WEB PAGES)

- DSD 2018: <http://dsd-seaa2018.fit.cvut.cz/main/>  
- Euromicro: [www.euromicro.org](http://www.euromicro.org)

#### DSD STEERING COMMITTEE

Lech Jozwiak (TU Eindhoven, NL) - Chairman  
Krzysztof Kuchcinski (U Lund, SE)  
António Nuñez (IUMA/ULPGC, ES)  
Francesco Loporati (U Pavia, IT)  
Eugenio Villar (TEISA U Cantabria, ES)  
José Silva Matos (U Porto, PT)

#### DSD PROGRAM CHAIRS

Martin Novotny (CTU Prague, CZ) - Chair  
Nikos Konofaos (U Thessaloniki, GR) - Co-chair

#### GENERAL CHAIR

Hana Kubatova (CTU Prague, CZ)

#### PUBLICATION CHAIR

Amund Skavhaug (Norwegian UST, NO)

#### PUBLICITY CHAIR

P. Kitsos (TEI of Western Greece, GR)

#### ASHWPA SESSION CHAIRS

F. Loporati (U Pavia, IT) - Chair  
R. Stojanovic (U Montenegro, ME) - Co-chair

#### ASHWPA PROGRAM COMMITTEE

S. Abdelhedi, (Ecole Nat. Ingen. Tunis, TN)  
A. Aminfair (EPFL Lausanne, CH)  
S. Autexier (GRC for Artif. Intelligence, D)  
A. Badnjevic (Int. Burch Univ., BIH)  
M. Baklouti (U Sfax, TN)  
C. Belloudy, (U Nice, F)  
F. Bensaali (U Qatar, QA)  
C. Goncu (Monash U, AUS)  
V. Conti (U Kore of Enna, IT)  
G. Devedzic (U Kragujevac, SRB)  
M. Enheleint-Aggelos (U Vlora, AL)  
S. Fateh (Miromico, CH)  
G. Florimbi (U Pavia, IT)  
H. Ghasemzadeh (Washington St. U, USA)  
H. Kalantarian (Stanford U, USA)  
S. Kocelski (U Stip, MK)  
O. Krejcar (U Hradec Karlove, CZ)  
F. Loporati (U Pavia, IT)  
J. Machado (U Porto, PT)  
J. Madsen (DTU, DK)  
A. Malik (U Auckland, AUS)  
E. Marenzi (U Pavia, IT)  
M. Martinez (U Cantabria, ES)  
O. Melnik (RSREU, Rus)  
M. Modarressi (U Tehran, IR)  
V. Muthukumar (U Nevada, USA)  
T. Orphanoudakis (Hellenic Open U, GR)  
A. Pawlak (Silesian UT of Poland, PL)  
O. Romain (U Cergy-Pontoise, FR)  
R. Sassi (U Milano, IT)  
M. Sawan (Pol. Montreal, CAN)  
A. Skraba (U Maribor, SLO)  
F. Soulier (LIRMM, FR)  
R. Stojanovic (U Montenegro, ME)  
E. Torti (U Pavia, IT)  
S. Vitabile (U Palermo, IT)  
J. Viik (U Tampere, FI)