AMNET 2016

Special Session on Ambient Networks

at the 8th International Conference on Computational Collective Intelligence Technologies and Applications (ICCCI 2016)

Halkidiki, Greece, September 28-30, 2016
Conference website: http://conferences.cwa.gr/iccci2016/

Special Session Organizers

Dr. **Vladimir Sobeslav** (chair)
Department of Information Technologies, Faculty of Informatics and Management
University of Hradec Kralove, Czech Republic
E-mail: vladimir.sobeslav@gmail.com

Prof. **Ondrej Krejcar** (vice-chair)
Head of Center of Basic and Applied Research, Faculty of Informatics and Management
University of Hradec Kralove, Czech Republic
E-mail: ondrej.krejcar@uhk.cz

Prof. **Peter Brida** (vice-chair)
Department of Telecommunications and Multimedia, Faculty of Electrical Engineering
University of Žilina, Slovakia
E-mail: peter.brida@fel.uniza.sk

Prof. **Peter Mikulecky** (vice-chair)
Head of Department of Information Technologies, Faculty of Informatics and Management
University of Hradec Kralove, Czech Republic
E-mail: peter.mikulecky@uhk.cz

Objectives and topics

The AMNET 2016 Special Session offers an opportunity to gather research scientific works related to Ambient Networks in context of ambient intelligence, ubiquitous networking, intelligent networks and architectures, smart sensors networks, and mobile computing, high-availability paradigm, parallel and distributed intelligence, quality of services, as well as educational, industrial and other application of advanced networking technologies.

Ambient Networks defines a new kind of network architecture, which can adapt to heterogeneous environments of different networking technologies, services and smart applications. According to the technological development we can see the rise of services and solutions that can connect users and systems all over the world. Mobile and other smart devices have changed the way we look at computing. Modern applications and systems allows applications to follow wherever users go. Implementation of solutions based on the idea of ubiquitous networking produces new challenges in such areas as management, security, technical solutions, infrastructure modeling, mobile devices support, etc.

The ubiquitous networks should be designed to better support existing and emerging applications. From a technological perspective, ubiquitous networking covers a broad palette of hardware and/or software technologies. Here we can include namely context-awareness, software defined applications and appliances, user adaptive interfaces, integration of smart devices and applications, dynamic network topology automation and adaptation, reliable high-speed communication, cloud computing integration, and many others.

The goal of this special session is to bring together researchers from different fields of expertise, leading to better mutual understanding, and to promote interaction in this new and interdisciplinary area. All in all, we want to create an opportunity for the participants to exchange about a wide range of topics related to the area of ambient networks.

Topics of interest include:

- Cloud computing and network virtualization,
- Distributed computing and databases in networking environment,
- Economical assets of network applications and services,
- Educational and e-learning aspects of networking,
- Intelligent networks and applications,
- Internet of Things and smart applications,
- Intrusion detection and prevention systems,
- Managerial and business aspects of ubiquitous networking,
- Measurement of applications and infrastructure services,

- Methodical approach to architecture development,
- Mobile and sensor networks,
- Multi-agent approaches in networking,
- Network automation and development,
- Network reliability, availability and scalability,
- Security aspects of ubiquitous networking,
- Software defined networks and devices,
- Specialized applications of ubiquitous services,
- System life-cycle management in networking environments,
- Usage studies and workload characterization,
- User interaction and cognitive aspects of ubiquitous networking,
- Wireless communication and networks.

Any other topics strongly related to Ambient Networks and Ubiquitous Networking are also welcome. Please contact directly session chairs to confirm a suitability of your paper topic.

Important dates

Submission of papers: **May 1, 2016**
Notification of acceptance:**June 1, 2016**
Camera-ready papers: **June 15, 2016**
Registration & payment: **June 15, 2016**
Conference date: **September 28-30, 2016**

Program Committee (to be extended) – confirmation in progress

Prof. Dr. Ana Almeida, Porto Superior Institute of Engineering, Portugal
Prof. Dr. Jorge Bernardino, Polytechnical Institute of Coimbra, Spain
Prof. Dr. Peter Brida, University of Žilina, Slovakia
Dr. Ivan Dolnak, University of Žilina, Slovakia
Dr. Elsa Gomes, Porto Superior Institute of Engineering, Portugal
Dr. Josef Horalek, University of Hradec Kralove, Czech Republic
Dr. Josef Janitor, Technical University of Kosice, Slovakia
Prof. Dr. Alipio Jorge, University of Porto, Portugal
Prof. Dr. Ondrej Krejcar, University of Hradec Kralove, Czech Republic
Prof. Dr. Goreti Marreiros, Porto Superior Institute of Engineering, Portugal
Prof. Dr. Peter Mikulecký, University of Hradec Kralove, Czech Republic
Dr. Juraj Machaj, University of Žilina, Slovakia
Dr. Marek Penhaker, VSB Technical University of Ostrava, Czech Republic
Prof. Dr. José Salmeron, Universidad Pablo de Olavide of Seville, Spain
Prof. Dr. Eng. Ali Selamat, Universiti Teknologi Malaysia (UTM), UTM Johor Bahru, Malaysia
Dr. Vladimir Sobeslav, University of Hradec Kralove, Czech Republic
Prof. Stylianakis Vassilis, University of Patras, Greece

Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: *AMNET 2016: Special Session on Ambient Networks.*

https://www.easychair.org/conferences/?conf=iccci16

Authors are invited to submit original previously unpublished research papers written in English, of up to 10 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at Springer's web site. Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the AMNET 2016 Program Committee. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.).