Workshop on Cloud Computing

at the XIX International Conference on Systems Science (ICSS 2016)
September 7-9, 2016, Wrocław, Poland
http://icss.pwr.wroc.pl/cc/cc.html

Objectives and topics

Cloud Computing has emerged to one of the most widespread used paradigms for on-demand resource provisioning and application development. Due to its popular characteristics like resource pooling, rapid elasticity, broad network access, or pay as you go pricing models, it has been widely adopted for a variety of application scenarios and use cases. Those unique attributes have led to a number of new research topics. Possibilities offered by modern cloud infrastructures gave researchers and developers an opportunity to design new application architectures, develop algorithms and methods for Big Data processing in the cloud, introduce new methods for web service management and resource management, propose new service composition methods, apply new business models for cloud services' delivery and develop methods for management of methods supporting Internet of Things data aggregation and processing in the cloud.

All these research topics are closely related and can be implemented in scenarios utilizing cloud computing in the Internet of Things (IoT). Applications in the scope of the IoT, such as telemedicine, smart homes, smart cities or applications with industrial background such as factory automation, logistics, or automotive are often based on a variety of heterogeneous sensor nodes and sensor networks collecting data about the environment. Both, amount and diversity of sensor nodes and resulting data streams are rapidly increasing. Thus, IoT applications can benefit from the ability to elastically provide computing-, network-, and storage resources offered by the Cloud. However, the Cloud Computing and Internet of Things domains show divergent characteristics in term of their underlying resources. While IoT developers often have to be aware of resource constraints, location and semantics of sensor nodes, non-functional and infrastructure management requirements, Cloud Computing is perceived as a rather homogenous and endless resource being accessible within seconds and without limits. Therefore, it is necessary to investigate and develop appropriate concepts that allow leveraging the advantages of the Cloud Computing for the challenging application scenarios of the Internet of Things domain.

This workshop is intended to bring together researchers, developers, and practitioners whose research works focus on cloud computing related topics described in this call. We encourage submissions on all theoretical and practical aspects, as well as experimental studies of deployed systems. Topics of interests include (but are not limited to) the following subject categories:

- Cloud Computing infrastructure
- Cloud Computing for Big Data
- Computing methods design and implementation

- Cloud Computing for Service Orinted Architectures
- Methods for resource allocation in cloud environments
- Web service and microservice composition methods
- Business models for Cloud Computing services delivery
- Cloud Computing models and architecture
- Cloud Computing applications
- Cloud computing for Internet of Things
- Models and methods of decision making support in Cloud Computing resources management
- Platforms for the integration of Cloud and IoT environments
- Security and Privacy for Cloud based IoT applications
- Non-functional requirements and Quality of service for Cloud based IoT applications

Important dates

Paper submission deadline: **15 May 2016**

Notification of acceptance: **6 June 2016**

Camera-ready papers: **15 June 2016**

Conference date: **7-9 September 2015**

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 online submission system:

https://easychair.org/conferences/?conf=icss20160

Authors are invited to submit original previously unpublished research papers written in English, from 6 to 11 pages, strictly following the Springer format guidelines. Authors can download the Latex 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 Workshop 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 Advances in Intelligent Systems and Computing (all books of this series are submitted to ISI Proceedings, EI-Compendex, DBLP, SCOPUS, Google Scholar and Springerlink).

Proceedings

The conference proceedings will be published in the Springer series:
Advances in Intelligent Systems and Computing.

Authors of selected papers will be invited to submit extended versions of their papers in the following international journals:

- **ACM Transactions on Intelligent Systems and Technology** (IF: **1.252**)
- **ACM Transactions on the Web** (IF: **1.255**)
- **Computers in Human Behaviour** (IF: **2.694**)

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