Call for Papers

9th International Workshop on Service-Oriented Cyber-Physical Systems in Converging Networked Environments (SOCNE) in conjunction with ETFA 2015

Luxembourg, September 8, 2015

Aim and topics

Smart and reliable service interoperability and composition across heterogeneous platforms and networking environments build the foundation for added-value services. Their key requirement is seamless, well-defined, and potentially cross-sectorial interoperability among stakeholders on application-, service-, and device level. Interoperability has become a competitive factor for many industrial branches such as automotive, aerospace, energy, healthcare, or factory and building automation. At the same time, it serves as an application enabler for cross-domain business as envisioned, e.g., for electro mobility, smart grid, or even cooperative engineering. This workshop encourages communication and exchange of ideas between industrial and academic researchers and developers in the field of preferably embedded middleware, service-oriented architectures, and heterogeneous networked environments. It follows the whole path from system engineering over system implementation to system testing and leverages the discussion about industrial practices and future trends. From this perspective, the workshop is focused on (but not restricted to) the following subjects:

Architectures and Design Principles

- Platforms, frameworks and tool support
- Configuration & management
- Creation, deployment, life cycle management
- System security, validation and testing
- Functional safety
- Semantic web services & web services ontology
- Real-time SOAs
- Decentralized/peer-to-peer architectures for device/application networking

Service platforms for CPS

- Service platforms for cyber-physical systems
- Service platforms for smart grid, smart traffic and smart cars, energy management, energy metering, and electro mobility
- Service platforms for smart home, smart building and smart cities
- Service platforms for ambient assisted living medical, clinics and healthcare systems
- Service platforms for process, factory, and industrial applications
- Enterprise architecture integration and product lifecycle management

Networked Embedded Systems, CPS, IoT & SOA

- Service-orientation in CPS and IoT
- Technologies for interworking smart objects
- Embedded web services
- Software defined networks (SDN)
- SOA for/on/in devices and embedded systems
- Device centric SOAs and RESTful environments
- Real-time embedded networked applications and systems
- Web services and middleware for networked embedded systems
- Resource constrained and low power lossy networks
- Scalability, reliability, safety, and security aspects
- Lightweight security suites for the Internet of Things
- SOA in the Internet and the Internet of Things
- Sensor systems, Sensor networks, Sensor clouds

Service Computing

- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Software as a service (SaaS)
- High Performance Computing as a service
- Cloud Services

Submission of papers: The working language of the workshop is English. Submissions are possible as full paper or extended abstract. Full Papers are limited to 8 double column pages in a font no smaller than 10-points. Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the Conference web site. Extended abstracts can be 1 to 2 double column pages in a font no smaller than 10-points. Extended abstracts will be made available on the SOCNE website.

Paper Acceptance: Each accepted paper must be presented at the workshop by one of the authors. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees, including authors and session chairpersons, must pay the conference registration fee, and their travel expenses.

No-show Policy: The ETFA 2015 Organizing Committee reserves the right to exclude a paper from distribution after the conference at IEEE Xplore if the paper is not presented at the conference.

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