# 2014 International Workshop on Process Aware Systems (PAS2014)

http://www.cs.sjtu.edu.cn/PAS2014

October 18-19, 2014, Shanghai, China



"Process" is a pervasive concept existing in almost every research and application field such as business, computing and information theory, engineering, Industrial and manufacturing, science and statistics, biology and psychology, Philosophy, and many others. Despite its various specific definitions for each field, a process can be interpreted as "a series of actions or steps taken in order to achieve a particular end" according to the Oxford Dictionary. In the recent decade, process related technologies have been extensively investigated and promoted in the area of business process management (BPM) and workflow management systems (WfMS) with topics covering the whole process lifecycle such as process modelling, process verification, process execution, workflow scheduling, process monitoring, process exception handling, and the analysis of historical data in BPM system and WfMS such as the statistical analysis for performance metrics and process mining. However, above topics have also been investigated (maybe with different terms) in many other production, management and IT service domains such as product line management, software process, Web services, and cyber-physical systems.

The International Workshop on Process Aware Systems (PAS2014) is a cross-area international forum on process aware systems. PAS2014 aims at bringing together researchers, developers, users, and practitioners interested in process management, and formally exploring various potentials about process management in the era of cloud computing and big data from the perspective of both academic and industry. Relevant topics include but are not limited to:

### ---- Foundations and Architecture for Process Aware Systems ---

- Process modeling languages, notations and methods
- Artifact-centric business processes
- Automated process composition & synthesis
- Resource management and workflow scheduling in process aware systems
- Software Techniques and Architectures for process aware systems
- Process-oriented software architectures
- Service-oriented architectures for Process Aware Systems
- Infrastructure as a service for process aware systems
- Platform as a service for Process aware systems
- Software as a service for Process aware systems

# ---- Big Data and Cloud Computing for Process Aware Systems ---

- Big data and big process management
- Big data processing and big process mining
- Cloud-based BPM and Workflow as a Service
- Security, privacy and trust in Big data/Cloud-based BPM
- Business process crowdsourcing based on social networks
- Business process in hybrid cloud environments
- Scientific workflows in the cloud

# ---- Monitoring, Adaptation and Improvement of Process Aware Systems ---

- Process tracing and monitoring
- Process performance measurement
- Process data analytics and visualization
- Adaptive and context-aware processes
- Business process lifecycle management
- Business process improvement

### ---- Applications and Empirical Studies of Process Aware Systems ---

- Knowledge-intensive processes
- Data-driven processes
- Distributed and mobile processes
- Inter-process planning and coordination
- Adoption and Practice of process aware systems
- Case studies and experience reports
- Process aware system education and training

## ---- Software Development Process for Process Aware Systems ---

- Development processes for emerging and evolving process aware systems
- Agile/Lean processes in (software) systems development
- Process issues in developing adaptive and evolving software systems
- Continuous process improvement in diverse areas and context
- Distributed/Global development and large-scale processes
- Process modeling, simulation and analysis
- Process/Project management and assessment
- Process metrics and tools
- Cost estimation and project planning
- Processes for cutting-edge software technologies, including (but not limited to) ubiquitous computing, cloud computing, multi-core technologies, and cellular technologies

## ---- Non-software Aspects of Process Aware Systems ---

 Processes in non-software domains (e.g., business, health care, manufacturing, transportation, etc.) with a demonstrated relationship to process aware systems

- Modeling of physical and computation processes
- Integrations of computation, communication, and control processes
- process -oriented control systems
- Process technology characterization, extraction, and modeling of design for manufacturability
- Applied Verification for Continuous and Hybrid Systems
- Process-variation aware embedded system design

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#### **Submission & Publication**

Submission

Papers should be formatted according to Springer's Communications in Computer and Information Science (CCIS, <a href="http://www.springer.com/series/7899">http://www.springer.com/series/7899</a>) formatting guidelines (for instructions please visit <a href="http://www.springer.com/computer/Incs?SGWID=0-164-6-793341-0">http://www.springer.com/computer/Incs?SGWID=0-164-6-793341-0</a>). Submissions must be in English and not exceed 15 pages of length. The title page must contain a short abstract clarifying the relation of the paper with the topics above. The paper must clearly state the problem being addressed, the goal of the work, the results achieved, and the relation to other work.

Industry papers must be clearly marked as such, so that they can be appropriately reviewed by the program committee. Concerning length and formatting, industry papers must follow the same rules and guidelines as research papers.

Papers should be submitted electronically in PDF format via the PAS2014 EasyChair submission site: https://www.easychair.org/conferences/?conf=pas20140

Submissions must be original contributions that have not been published previously, nor already submitted to other conferences or journals in parallel with this conference. Each submission will be peer reviewed by at least three program committee members.

### Publication

All accepted papers will be included in the conference proceedings published by Springer in the CCIS series. For each accepted paper, at least one author must register for the conference and present the paper.

### **Key Dates**

Full papers due: August 10, 2014

Notification of acceptance: September 10, 2014 Camera-ready papers deadline: October 10, 2014

Conference: October 18-19, 2014

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