



Castle of Pau - France by thierry llansades



SAC 2018 The 6th track on *Software Architecture: Theory, Technology, and Applications (SA-TTA)*

Pau, France
April 9 - 13, 2018

ABSTRACT

Nowadays Software Architecture is a consolidated and necessary discipline centered on the idea of reducing complexity in software development and evolution through abstraction and separation of concerns. Designing software architectures that enable provisioning and evolution of functional requirements and exhibit a good tradeoff between multiple quality attributes (or extra-functional requirements) is hard and still challenging. At the same time having adaptable software architectures able to change their topology and behavior to overcome certain environmental situations is still under analysis in different domains especially when they are used to realize complex and distributed systems (i.e., systems of systems). The goal of the track SA-TTA is to bring together researchers and industry R&D having the common objective of transforming Software Architecture into a mature discipline leveraging on both solid scientific foundations and validated engineering methodologies and tools. SA-TTA is focused broadly on how to address functional requirements and quality characteristics in the design, maintenance, and adaptation and evolution of software architectures through the support of automated techniques and tools. Of special interest are architecture description languages, formalisms, techniques, methodologies, tools, and runtime environments that support these activities, possibly exploiting model-driven engineering principles. A special emphasis will be put also on technical aspects of software architectures development for specific class of software systems and application domains.

The SA-TTA track seeks to attract scholars, researchers, engineers, and practitioners interested in Applied Software Architecture, namely a special emphasis will be put on practical engineering concerns, experiences in tools development, and applications of Software Architecture.

TOPICS

Specific topics include, but are not limited to:

- Architecture description languages and component models for Software Architectures
- Architectural patterns, tactics, styles, viewpoints, and tool support
- Software architecture modeling, analysis methods and tools
- Software architecture and development practices such as agile development and global software development
- Architecture quality measures and tool support
- Formal validation and verification techniques for Software Components and Architectures
- Linking architecture to requirements and implementation
- Testing based on Software Architecture
- Recovery of Software Architecture
- Architecture based Software Evolution and mMaintenance
- Model-driven methodologies and tools for Software Architectures
- Dynamic Software ArchitecturesService-oriented Architectures and Microservices
- Software Architectures for Software Product Lines
- Software Architectures for legacy systems and systems integration
- Software Architectures for Real-time and Embedded Systems
- Software Architectures for Self-adaptive Systems
- Software Architectures for Collective Adaptive Systems
- Software Architectures for System-of-Systems
- Software Architectures for Cloud-based applications and services
- Software Architectures for Mobile cloud computing
- Software Architectures for IoT applications
- Software Architectures for Social Computing
- Software Architectures for Sociotechnical systems
- Software Architectures for Data-Intensive Systems
- Software Architectures for Artificial Intelligence Systems
- Industrial experiments and case studies

See the website for more details: <http://dinamico2.unibg.it/sa-tta/2018/>

IMPORTANT DATES

- September 15, 2017:** Submission of regular papers and SRC abstracts
- November 10, 2017:** Notification of papers and posters and SRC acceptance/rejection
- November 25, 2017:** Camera-ready copies of accepted papers
- December 10, 2017:** Author registration due date

TRACK CHAIRS

- Marina Mongiello**, Polytechnic University of Bari, Italy
- Diego Perez-Palacin**, University of Zaragoza, Aragón, Spain
- Sungwon Kang**, Korea Advanced Institute of Science and Technology, Daejeon, Korea
- Patrizia Scandurra**, University of Bergamo, Italy

Program committee

- Yamine Ait-Ameur - IRIT/ENSEEIH, France
- Jesper Andersson - Linnaeus University, Sweden
- Paolo Arcaini - Charles University in Prague
- Oliver Barais - INRIA, France
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- Radu Calinescu - University of York, UK
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