The 30th ACM/SIGAPP Symposium On Applied Computing (SAC 2015)
Track on *Software Architecture: Theory, Technology, and Applications (SA-TTA)*
www.unibg.it/sa-tta/2015/

Aim and scope The Third Edition of the *Software Architecture: Theory, Technology, and Applications (SA-TTA 2015)* is part of the 30th *ACM/SIGAPP Symposium on Applied Computing (SAC)*. For the past twenty-nine years, ACM SAC has been a primary gathering forum for applied computer scientists, computer engineers, software engineers, and application developers from around the world. SAC 2015 is sponsored by the ACM Special Interest Group on Applied Computing (SIGAPP), and will be held in Salamanca (Spain), a UNESCO Declared World Heritage City.

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 exhibit a good tradeoff between functional requirements and multiple quality attributes (or extra-functional requirements) is hard and still challenging. At the same time to have 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. 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 Maintenance
- Model-driven methodologies and tools for Software Architectures
- Dynamic Software Architectures
- 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 Social Computing
- Software Architectures for Sociotechnical systems

- Industrial experiments and case studies

Submissions

Regular papers: Authors are invited to submit original unpublished papers. Submission of the same paper to multiple tracks is not allowed. The program committee will <u>blindly review</u> submissions to the track. The author(s) name(s) and address(es) must not appear in the body of the paper, and self-reference should be in the third person. This is to facilitate blind review. SA-TTA track chairs will not submit to the track. Submissions from SA-TTA PC members and track chairs of other SAC tracks are welcome. Paper submissions must be made electronically in PDF format via the ACM SAC online submission system. Details on the paper format and submission guidelines can be found on the SAC 2015 website http://www.acm.org/conferences/sac/sac2015/. The maximum length for papers is 8 pages. Accepted papers whose camera-ready version will exceed 6 pages will have to pay an extra charge.

Student Research Competition: The Student Research Competition (SRC) program, sponsored by Microsoft Research, is a newly added program to the ACM SIGAPP Symposium on Applied Computing (SAC). The SAC 2015 SRC program provides graduate students the opportunity to meet and exchange ideas with researchers and practitioners in their areas of interest. Active graduate students seeking feedback from the scientific community on their research ideas are invited to submit abstracts of their original un-published and in-progress research work in areas of experimental computing and application development related to SAC 2015 Tracks. For more details, visit the SAC 2015 website http://www.acm.org/conferences/sac/sac2015/

Paper Registration

Paper registration is required, allowing the inclusion of the paper/poster in the conference proceedings. An author or a proxy attending SAC MUST present the paper. This is a requirement for the paper/poster to be included in the ACM/IEEE digital library. No-show of scheduled papers and posters will result in excluding them from the ACM/IEEE digital library.

Important Dates

- September 12, 2014: Submission of regular papers and SRC research abstracts
- November 17, 2014: Notification of paper and SRC acceptance/rejection
- December 08, 2014: Camera-ready copies of accepted papers/SRC
- December 15, 2014: Author registration due date
- April 14, 2015: SRC Poster Presentations
- April 15, 2015: SRC Oral Presentations

Program Committee:

Yamine Ait-Ameur - IRIT/ENSEEIHT, France	Antonia Lopes - University of Lisbon, Portugal
ChangSup Keum - ETRI, Korea	Hernan Melgratti - University of Buenos Aires, Argentina
José Javier Merseguer - University of Saragoza, Spain	Henry Muccini - University of L'Aquila, Italy
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Eva Kühn - Vienna University of Technology, Austria	Marten van Sinderen - University of Twente, The Netherlands
Chan-gun Lee - Chung-Ang University, Korea	Danny Weyns - University of Linnaeus, Sweden
Jihyun Lee - Daejeon University, Korea	Tao Yue - Simula Labs, OSLO, Norway

Track Chairs:

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