

## 29th Annual ACM Symposium on Applied Computing (SAC 2014)

### Track on

### *Software Architecture: Theory, Technology, and Applications (SA-TTA)*

[www.unibg.it/sa-tta14](http://www.unibg.it/sa-tta14)

**Aim and scope** The Second Edition of the *Software Architecture: Theory, Technology, and Applications (SA-TTA 2014)* is part of the 29th *ACM Symposium on Applied Computing (SAC)*. For the past twenty-eight 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 2014 is sponsored by the ACM Special Interest Group on Applied Computing (SIGAPP), and will be held in the historic city of Gyeongju, Korea.

Nowadays Software Architecture is considered 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 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, styles, viewpoints, and tool support
- Adaptivity architectural patterns and tactics
- Architecture quality measures and tool support
- Functional validation and verification techniques for Software Components and Architectures
- Linking architecture to requirements and implementation
- Software architectures at run-time
- Software Product Lines for Software Architecture
- 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 Cloud-based applications and Services
- Software Architectures for Social Computing
- Software Architectures for Collective Adaptive Systems

- Model-driven methodologies and tools for Software Architectures
- 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 blindly review 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 2014 website

<http://www.acm.org/conferences/sac/sac2014/>. 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 2014 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 2014 Tracks.

For more details, please see SAC 2014 Call for Student Research Abstracts:

<http://www.acm.org/conferences/sac/sac2014/SAC2014-CFSRC.pdf>

and the SRC Information Sheet

[http://www.acm.org/conferences/sac/sac2014/SRC 2014 Information Sheet.pdf](http://www.acm.org/conferences/sac/sac2014/SRC%2014%20Information%20Sheet.pdf)

## 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 (strict)

### Regular papers:

- Paper Submission: September 13, 2013
- Author Notification: November 15, 2013
- Camera-ready copies: December 6, 2013

### Student research abstracts:

- Research Abstracts: September 13, 2013
- Author Notification: November 15, 2013
- Presentations: March 24-28, 2014
-

## Program Committee:

Oliver Barais - INRIA, France Marco Aimar - Opera21 Company, Italy Yamine Ait-Ameur - IRIT/ENSEEIH, France Luciano Baresi - Politecnico di Milano, Italy Antonia Bertolino - ISTI-CNR, Pisa, Italy Rafael Capilla - Rey Juan Carlos University, Madrid, Spain Sang Ho Choi, LG Electronics, Korea Ivica Crnkovic - MDU, Sweden Stefania Gnesi - ISTI-CNR, Pisa, Italy Claudia Ermel - TU of Berlin, Germany ChangSup Keum, ETRI, Korea Paola Inverardi - University of L'Aquila, Italy Eva Kühn - Vienna University of Technology, Austria Patricia Lago - VU University, Amsterdam Chan-gun Lee, Chung-Ang University, Korea Antonia Lopes - University of Lisbon, Portugal	Annapaola Marconi - FBK-IRST, Trento, Italy Hernan Melgratti - University Of Buenos Aires Henry Muccini – University of L'Aquila Naranker Dulay - Imperial College London, UK Fiona Polack - University of York, UK Pasqualina Potena - University of Bergamo, Italy Elvinia Riccobene - University of Milan, Italy Ita Richardson - University of Limerick, Ireland Antonino Sabetta - SAP Research, France Romina Spalazzese - University of L'Aquila, Italy Marten van Sinderen - University of Twente, The Netherlands Norha Milena Villegas - University of Victoria, CA Danny Weyns - University of Linnaeus, Sweden Tao Yue - Simula Labs, OSLO, Norway
---	---

## Track Chairs:

**Antonio Bucchiarone**, SOA Research Unit of Bruno Kessler Foundation of Trento, Italy

**E-mail:** [bucchiarone@fbk.eu](mailto:bucchiarone@fbk.eu) **Web page:** <http://soa.fbk.eu/bucchiarone>

**Sungwon Kang**, Korea Advanced Institute of Science and Technology, Daejeon, South Korea.

**E-mail:** [sungwon.kang@kaist.ac.kr](mailto:sungwon.kang@kaist.ac.kr) **Web page:** <http://salab.kaist.ac.kr/>

**Raffaella Mirandola**, Dipartimento di Elettronica e Informazione, Politecnico di Milano, Italy

**E-mail:** [mirandola@elet.polimi.it](mailto:mirandola@elet.polimi.it) **Web page:** <http://home.dei.polimi.it/mirandola/>

**Patrizia Scandurra**, Dipartimento di Ingegneria dell'Informazione e Metodi Matematici (DIIMM) of the University of Bergamo, Italy.

**E-mail:** [patrizia.scandurra@unibg.it](mailto:patrizia.scandurra@unibg.it) **Web page:** <http://cs.unibg.it/scandurra/>