SETTA 2016

Symposium on Dependable Software Engineering: Theories, Tools and Applications

Nov. 9-11, 2016, Beijing, China

http://lcs.ios.ac.cn/setta/

KEYNOTE SPEAKERS

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Shaoying Liu, Hosei University, Japan

Zhiming Liu, Southwest University, China

Xiaoguang Mao, National University of Defense Technology, China

Markus Müller-Olm, Westfälische Wilhelms-Universität Münster, Germany

Raja Natarajan, Tata Institute of Fundamental Research, India

Jun Pang, University of Luxembourg, Luxembourg

Shengchao Qin, Teesside University, UK

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Stefan Ratschan, Czech Academy of Sciences, Czech Republic

Martin Steffen, University of Oslo, Norway

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Cong Tian, Xidian University, China

Tarmo Uustalu, Tallinn University of Technology, Estonia

Chao Wang, Virginia Tech, USA

Farn Wang, National Taiwan University, China

Heike Wehrheim, University of Paderborn, Germany

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BACKGROUND AND OBJECTIVES

The aim of the symposium is to bring together international researchers and practitioners in the field of software technology. Its focus is on formal methods and advanced software technologies, especially for engineering complex, large-scale artifacts like cyber-physical systems, networks of things, enterprise systems, or cloud-based services. Contributions relating to formal methods or integrating them with software engineering, as well as papers advancing scalability or widening the scope of rigorous methods to new design goals are especially welcome.

Being hosted in China, the symposium will also provide a platform for building up research collaborations between the rapidly growing Chinese computer science community and its international counterpart. The symposium will support this process through dedicated events and therefore welcomes both young researchers considering international collaboration in formal methods and established researchers looking for international cooperation and willing to attract new colleagues to the domain.

Authors are invited to submit papers on original research, industrial applications, or position papers proposing challenges in fundamental research and technology. The latter two types of submissions are expected to contribute to the development of formal methods either by substantiating the advantages of integrating formal methods into the development cycle or through delineating need for research by demonstrating weaknesses of existing technologies, especially when addressing new application domains.

Submissions can take the form of either normal or short papers. Short papers can discuss ongoing research at an early stage, including PhD projects. Papers should be written in English. Regular Papers should not exceed 15 pages and Short Papers should not exceed 6 pages in LNCS format. The proceedings will be published as a volume in Springer's LNCS series. The authors of a selected subset of accepted papers will be invited to submit extended versions of their papers to appear in a special issue of the Formal Aspects of Computing journal.

TOPICS

Topics of interest include, but are not limited to:

* Requirements specification and analysis
* Formalisms for modeling, design and implementation
* Model checking, theorem proving, and decision procedures
* Scalable approaches to formal system analysis
* Formal approaches to simulation and testing
* Integration of formal methods into software engineering practice
* Contract-based engineering of components, systems, and systems of systems
* Formal and engineering aspects of software evolution and maintenance
* Parallel and multicore programming
* Embedded, real-time, hybrid, and cyber-physical systems
* Mixed-critical applications and systems
* Formal aspects of service-oriented and cloud computing
* Safety, reliability, robustness, and fault-tolerance
* Empirical analysis techniques and integration with formal methods
* Applications and industrial experience reports
* Tool integration

IMPORTANT DATES

* Abstract Submission: June 19, 2016
* Full Paper Submission: June 19, 2016 (AOE time, UTC-12)
* Notification to Authors: Aug. 1, 2016
* Camera-ready Paper: Aug. 25, 2016