



## SETTA 2015

### Symposium on Dependable Software Engineering: Theories, Tools and Applications

November 4-6, 2015, Nanjing, China

<http://cs.nju.edu.cn/setta/>

#### KEYNOTE SPEAKERS

Sanjoy Baruah, University of North Carolina at Chapel Hill, USA  
David Harel, Weizmann Institute of Science, Israel  
Huimin Lin, Institute of Software, CAS, China

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Xiaoguang Mao, NUDT, China  
Jun Pang, University of Luxembourg, Luxembourg  
Paritosh Pandya, Tata Institute of Fundamental Research, India  
Paul Pettersson, Mälardalen University, Sweden  
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Farn Wang, National Taiwan University, TW, China  
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Ji Wang, NUDT, China  
Kwangkeun Yi, Seoul National University, Korea  
Naijun Zhan (Chair), Institute of Software, CAS, China

#### 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 Aspect 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

June 23, 2015(extended) Abstracts  
June 30, 2015(extended) Submission of papers  
August 21, 2015 Notification to authors  
September 4, 2015 Camera-ready versions