SETTA 2017

Symposium on Dependable Software Engineering: Theories, Tools and Applications October 23-25, 2017, Changsha, China

setta2017@ios.ac.cn, http://lcs.ios.ac.cn/setta2017/

Important Dates

► Abstract & paper submission (Extended): June 21, 2017 (AoE)

► Notification to authors (Extended): July 25, 2017 (AoE)

► Camera ready version (Extended): August 10, 2017 (AoE)

► Conference date: October 23-25, 2017

Scope

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. SETTA 2017 is planning to organize a special thematic section, namely *Dependability of Smart Cyber-Physical Systems*.

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 multi-core programming
- ▶ Embedded, real-time, hybrid, and cyber-physical systems
- Mixed-critical applications and systems
- ▶ Formal aspects of service-oriented and cloud computing
- ► Safety, security, reliability, robustness, and fault-tolerance
- Dependability of smart software and systems
- ► Empirical analysis techniques and integration with formal methods
- Applications and industrial experience reports
- ► Tool integration

Paper Submission

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. Springer will support best paper awards of SETTA 2017. Submissions can take the form of either regular 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 16 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, www.springer.com/lncs. 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 Elsevier's Science of Computer Programming. The submission webpage is

https://easychair.org/conferences/?conf=setta2017

Keynotes

Cliff Jones, Newcastle University, UK
Rupak Majumdar, Max Planck Institute for
Software Systems, Germany
Sanjit Seshia, University of California, Berkeley,
USA

Organizers

General chair:

Xiangke Liao, NUDT, China

Program Chairs:

Kim G. Larsen, Aalborg University, Denmark Oleg Sokolsky, University of Pennsylvania, USA Ji Wang, NUDT, China

Publicity Chair:

Fu Song, Shanghai Tech University, China

Local Organization Chair:

Wei Dong, NUDT, China

PC Members

Erika Abraham, RWTH Aachen University, Germany Farhad Arbab, CWI and Leiden University, Netherlands Sanjoy Baruah, University of North Carolina, USA Michael Butler, University of Southampton, UK

Yunxin Deng, ECNU, China

Deepak D'Souza, Indian Institute of Science, India Xinyu Feng, University of Science and Technology of

China, China

Martin Fränzle, University of Oldenburg, Germany Goran Frehse, University of Grenoble Alpes-Laboratoire Verimag, France

Lindsay Groves, University of Wellington, New Zealand Dimitar Guelev, Bulgarian Academy of Sciences, Bulgaria

Fei He, Tsinghua University, China

Deepak Kapur, University of New Mexico, USA

Kim Larsen, University of Aalborg, Denmark

Axel Legay, IRISA/INRIA, France

Xuandong Li, Nanjing University, China

Shaoying Liu, Hosei University, Japan

Zhiming Liu, Southwest University, China

Xiaoguang Mao, NUDT, China

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

Raja Natarajan, TIFR, India

Jun Pang, University of Luxembourg, Luxembourg

Shengchao Qin, Teesside University, UK

Stefan Ratschan, Czech Academy of Sciences, Czech

Sriram Sankaranarayanan, University of Colorado, USA

Oleg Sokolsky, University of Pennsylvania, USA

Martin Steffen, University of Oslo, Norway

Zhendong Su, UC Davis, USA

Cong Tian, Xidian University, China

Tarmo Uustalu, Tallinn University of Technology, Estonia

Chao Wang, University of Southern California, USA
Farn Wang, National Taiwan University, TW, China

Ji Wang, NUDT, China.

Heike Wehrheim, University of Paderborn, Germany

Michael Whalen, University of Minnesota, USA

Wang Yi, Uppsala University, Sweden

Naijun Zhan, ISCAS, China

Lijun Zhang, ISCAS, China

Qirun Zhang, UC Davis, USA **Haibo Zeng**, Virginia Tech University, USA