

MoLS 2017 Workshop

Chairs' Welcome / Introduction

It is our great pleasure to welcome you to MoLS 2017, the First International Workshop on Monitoring in Large-Scale Software Systems. MoLS 2017 aims to explore and explicate the current state, ongoing work and open issues regarding monitoring in large-scale software systems. We also want to support the transfer of knowledge between different disciplines and domains working on this topic. Large-scale, heterogeneous software systems – e.g., cyber-physical systems, cloud-based systems, or service-based systems – are ubiquitous in many domains. Such systems' full behavior emerges only at runtime, when the involved systems interact with each other, hardware, third-party systems, or legacy systems. Thus, engineers are interested in monitoring the overall system, for instance, to verify components' correct timing or measure performance and resource consumption. The complexity and heterogeneity of large-scale software systems, however, complicates monitoring. Properties need to be checked across the boundaries of multiple constituent systems and heterogeneous, domain-specific technologies need to be instrumented. Also, different types of properties must be checked and systems exist in many different versions and variants. In response to these and other challenges, MoLS 2017 focuses on methods and tools supporting monitoring in large-scale software systems and explores how software systems of realistic complexity can be monitored effectively and efficiently.

MoLS 2017 will start with an introductory round followed by a keynote by Alexey Fishkin and Alexander Loginov from Siemens AG. They will report on their experiences with data analytics and monitoring in industry. We will then have four paper presentations (see below) followed by a discussion session focusing on community initiatives and open challenges in research and practice as well as the future of the workshop. Please refer to the workshop website for details and current information.

Three full papers and one short paper were accepted (ordered by type and alphabetically):

- Distributed Compliance Monitoring of Business Processes over MapReduce Architectures
by Daniela Loreti, Federico Chesani, Anna Ciampolini, and Paola Mello.
- Efficient Analysis at Edge
by Tatiana Mangels, Alin Murarasu, Daniel Becker, and Forest Oden.
- From Resource Monitoring to Requirements Monitoring – An Integrated Approach
by Holger Eichelberger, Cui Qin, and Klaus Schmid.
- A Continuous Software Quality Monitoring Approach for Small and Medium Enterprises
by Andrea Janes, Valentina Lenarduzzi, and Alexandru Cristian Stan (short paper).

All papers have been reviewed by at least three program committee members in a single-blind review process. Mutually agreed decisions were reached through online discussion. We want to thank all PC members (see workshop website) and especially the authors for their contributions.

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MoLS 2017 (<http://mevss.jku.at/mols2017>) Organizers

**iCPE
2017**

MoLS 2017 Organization

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