

CALL FOR PAPERS

iFMCloud:

1st International Workshop on Formal Methods for and on the Cloud co-located with iFM 2016, 1-4 June 2016, Reykjavik, Iceland

<https://ifmcloud2016.nntb.no/>

Motivation

Cloud solutions are increasingly used for a plethora of purposes, including solving memory-intensive and computation-intensive problems. Ensuring the reliability, availability, scalability, and security of cloud solutions, as networked distributed systems with properties such as dynamic reallocation of resources, is a challenging problem that requires rigorous modeling, analysis, and verification tools. Such tools can be devised using the techniques provided by the formal methods community. On the other hand, many formal analysis and verification tools are memory-intensive and computation-intensive solutions, which can benefit from the cloud technology.

The goal of the iFMCloud workshop is to identify and better understand challenges of using formal and semi-formal methods for modeling and verification of Cloud-based systems and computer and communication networks, as well as challenges and opportunities in providing formal analysis and verification as services on the Cloud. We aim to reach these goals by bringing together researchers and practitioners from these, and other related fields.

Topics

We particularly encourage position papers and experience reports, which identify and structure open challenges and research questions. We are interested in all topics related to synergies between the fields of formal and semi-formal methods and the fields of cloud computing and computer and communication networks, including but not limited to:

- Formal and semi-formal methods for modeling, analysis, and verification of Cloud-based systems and computer and communication networks:
 - Methods for analysis and design of cloud infrastructures
 - Methods for analysis and design of cloud applications
 - Modeling and verification of networked systems in particular SDN-based systems
 - Runtime analysis, monitoring, and performance evaluation
- Formal analysis and verification as services on the Cloud
 - Opportunities and challenges of providing formal analysis and verification as services on the Cloud
 - Distributed algorithms for analysis and verification
- Testing as a service on the Cloud
- Case studies and experience reports
- Position statements setting a research agenda for collaboration between the formal methods community, the cloud computing community, and other related fields

Submission guidelines

Authors are invited to submit position papers and experience reports (max 8 pages) in EPTCS proceedings format. Submissions must be original, and will be selected based on the relevance to the workshop topics and the suitability to trigger discussions. All submissions will be reviewed by at least three members of the program committee. We plan to publish accepted papers in an EPTCS volume. Papers should be submitted via EasyChair at:

<https://easychair.org/conferences/?conf=ifmcloud16>

Important Dates

Abstract submission deadline:	February 13, 2016
Paper submission deadline:	February 20, 2016
Author notifications:	March 25, 2016
Camera-ready copies:	April 10, 2016
Workshop date:	June 4, 2016

Contact Information

To contact the organizers, please send an email to:

ifmcloud16-organizers@googlegroups.com

Organizing Committee

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