



# LT 2015

## Large-Scale Testing

# LT 2015

The Fourth International Workshop on Large-Scale Testing  
Co-located with ICPE 2015 in Austin, TX, USA  
<http://lt2015.eecs.yorku.ca/>

## Workshop Organizers

**Andreas Brunnert**  
([andreas.brunnert@fortiss.org](mailto:andreas.brunnert@fortiss.org))  
fortiss GmbH, Germany  
**Zhen Ming (Jack) Jiang**  
([zmjiang@cse.yorku.ca](mailto:zmjiang@cse.yorku.ca))  
York University, Canada

## Program Committee

**Bram Adams** (École Polytechnique de Montréal, Canada)  
**Cor-Paul Bezemer** (Delft University of Technology, Netherlands)  
**Thomas Cerqueus** (University College Dublin, Ireland)  
**Christoph Csallner** (University of Texas at Arlington, USA)  
**Shaun Dunning** (NetApp Inc., USA)  
**Gregory Franks** (Carleton University, Canada)  
**Vahid Garousi** (University of Calgary, Canada)  
**Ahmed E. Hassan** (Queen's University, Canada)  
**Robert Horrox** (EMC Isilon, USA)  
**André van Hoorn** (University of Stuttgart, Germany)  
**Diwakar Krishnamurthy** (University of Calgary, Canada)  
**Haroon Malik** (University of Waterloo, Canada)  
**Jerome A. Rolia** (HP Labs, USA)  
**Gerson Sunyé** (University of Nantes, France)  
**Anthony Ventresque** (University College Dublin, Ireland)

## Important Dates

Research Papers: Nov. 16<sup>th</sup>, 2014  
Paper Notifications: Nov. 30<sup>th</sup>, 2014  
Camera Ready: Dec. 10<sup>th</sup>, 2014  
Industry Talks: Jan. 9<sup>th</sup>, 2015  
Talk Notifications: Jan. 14<sup>th</sup>, 2015  
Workshop Date: Feb. 1<sup>st</sup>, 2015

## Steering Committee

**Ahmed E. Hassan** (Queen's University, Canada)  
**Zhen Ming (Jack) Jiang** (York University, Canada)  
**Marin Litoiu** (York University, Canada)

## Location

Co-located with ICPE 2015

**6th ACM/SPEC Int'l Conference on Performance Engineering  
ICPE 2015**

Austin, TX, USA — Jan 31–Feb 4

## Website

<http://lt2015.eecs.yorku.ca/>

## Call for Papers

Many large-scale software systems (e.g., e-commerce websites, telecommunication infrastructures, enterprise systems, etc.) must service hundreds, thousands or even millions of concurrent requests. Many field problems of these systems originate in their inability to scale to field workloads, rather than feature bugs. In addition to conventional functional testing, these systems must be tested with large volumes of concurrent requests (called the *load*) to ensure the quality of these systems. *Large-scale testing* includes all different objectives and strategies of testing large-scale software systems using load. Examples of large-scale testing are live upgrade testing, load testing, high availability testing, operational profile testing, performance testing, reliability testing, stability testing and stress testing.

Large-scale testing is a difficult task requiring a great understanding of the system under test. Practitioners face many challenges such as tooling (choosing and implementing the testing tools), environments (software and hardware setup) and time (limited time to design, test, and analyze). Yet, little research is done in the software engineering domain concerning this topic. Moreover, prior large-scale testing research is largely focused on telecommunication applications and web-based e-commerce systems. Industry is focused primarily on creating tools to automatically drive specified load into the system under test (e.g., LoadRunner or Apache JMeter). In this workshop, we intend to bring together industrial practitioners and researchers to establish and grow an academic research community around this important and practical research topic. Especially as large-scale testing is gaining more importance, due to an increasing number of systems (on-premise and/or cloud-based systems) that need to serve thousands or millions of users.

We solicit the following two tracks of submissions: **technical papers** (maximum 4 pages) and **extended abstracts** for industry talks (maximum 700 words). Technical papers should follow the standard ACM SIG proceedings format<sup>1</sup> and need to be submitted electronically via EasyChair<sup>2</sup>. Extended abstracts need to be submitted as “abstract only” submissions via EasyChair. Accepted technical papers will be published in the ICPE 2015 Proceedings. Extended abstracts will not be published in the ICPE 2015 proceedings. Submitted papers can be research papers, position papers, case studies or experience reports addressing issues including but not limited to the following:

- Efficient and cost-effective test executions
- Rapid and scalable analysis of the test results
- Case studies and experience reports on large-scale testing
- Large-scale testing on emerging systems (e.g., adaptive/autonomic systems or cloud services)
- Taxonomies of testing large-scale software systems
- Large-scale testing in the context of agile software development process
- Using performance models to support large-scale testing
- Efficient test data management for large-scale testing

1. <http://www.acm.org/sigs/publications/proceedings-templates>
2. <https://www.easychair.org/conferences/?conf=lt2015>