Call for Papers

Modern software systems ranging from e-commerce websites to communication infrastructures must service millions of users. Many field problems of these systems are due to their inability to scale to field workloads, not due to feature bugs. To assure the quality of these systems, load testing simulates thousands or millions of users performing tasks at the same time. A load test can last from several hours to a few days, during which gigabytes of performance counter and log data is generated.

Load testing is a difficult task requiring a great understanding of the system under test. Problems in the system under test, the load generator or the load environment all possible sources of load testing challenges. Yet, load testing has received relatively little attention in the software engineering research community. Load testing is gaining more importance, as an increasing number of services are being offered in the cloud to millions of users.

This one-day workshop brings together software testing researchers, practitioners, and developers of load testing tools to discuss the challenges and opportunities of performing load testing research on large scale software systems. Our ultimate goal is to establish and grow an active community around this important and practical research topic.

Papers should be at most 5 pages using the two-column IEEE conference publication format (http://www.computer.org/portal/web/cscps/formatting) and need to be submitted electronically via EasyChair (https://www.easychair.org/conferences/?conf=lt2012). Accepted papers will be published in the ICST 2012 Proceedings. Submitted papers can be research papers, position papers, case studies or experience reports addressing issues including but not limited to the following:

- Optimal planning of load tests to reduce the number of needed resources to conduct large scale load tests;
- Development of realistic load tests;
- Optimized execution of load tests to reduce the number and duration of tests;
- Efficient analysis of the load test results (e.g., large volume of logs and performance counters through data mining techniques);
- Load testing of adaptive/autonomic systems, systems in the cloud;
- Leveraging cloud computing to conduct load testing;
- Leveraging the extensive software testing literature to solve load testing challenges;
- Case studies and experience reports on load testing large scale systems.