10th IEEE International Workshop on QUALITY ORIENTED REUSE OF SOFTWARE (QUORS' 2016)

IN CONJUNCTION WITH COMPSAC 2016

GOAL OF THE WORKSHOP

Software reuse has been one of the most effective paradigms for building software systems and applications for decades. Recently, the rapid and fundamental advances in computing technologies have been driving the role and scope of software systems to new levels. A number of new types of software systems are emerging, among which service based systems, pervasive computing, cloud computing and big data applications are eminent examples. The advent of these emerging systems has raised the level of software reuse to services, large-scale components or agglomeration of components in more challenging context which is pervasive, service-oriented, embedded real-time, trustworthy, or in very large corporation scale in new application domains such as Big Data. Systematic and large-scale reuse of reusable assets at multiple development levels is improving the efficiency of software development activities significantly in terms of cost and time.

However, previous research in software reuse mainly focused on the functional aspect of a system, tended to ignore or treat the quality aspects trivially. Modern computing models tend to be globally distributed, ubiquitous, highly trustworthy, and dynamically adaptive. These systems, such as pervasive/ubiquitous systems, embedded systems, cloud services, and big data applications, have imposed more rigorous quality requirements on software reuse technologies. Today in the "cloud era", it becomes a great challenge to meet the new requirements of emerging software systems and meanwhile enjoy the benefits of substantial software reuse.

Recently, the research community and industry have been aware of the above weakness and much work has been ongoing. In this workshop we wish to bring together researchers and practitioners to share latest research results, advances and practical experiences under the banner of "*Quality Oriented Reuse of Software for Emerging Software Systems in Cloud Era*". The workshop will act as a forum for active discussion, idea stimulation and communication.

THEME AND SCOPE OF THE WORKSHOP

The workshop will bring together researchers and developers from academia and industry for advancing the methodology and technology of software reuse which emphasizes meeting strict quality requirements, such as dependability, agility and performance, particularly in the context of emerging types of software systems. The workshop seeks new approaches, system architectures and tools that facilitate the quality aspects of software reuse technologies.

Topics of interest include, but are not limited to:

- Cloud computing services: SaaS, PaaS and IaaS;
- Quality of clouds services;
- Pervasive or ubiquitous systems;
- Reuse of trustworthiness, privacy and security models
- Trustworthy software reuse methods;
- Dependable component-based systems;
- Software product lines;
- Quality aspects of design patterns;
- Software evolution;
- Software quality metrics and testing;
- Model-driven software engineering;
- Component and service repository;
- Quality in component reuse during modernization of legacy applications
- Service Oriented Systems (SOA);
- COTS product reuse;
- Reuse in safety critical systems;
- Reuse in service and component based Enterprise Systems;
- Reuse in embedded software systems;
- Test design reuse;
- Open source software reuse;
- Aspect-oriented software reuse;
- Resilient (adaptive) reuse;
- Architecture and models for Big Data applications;
- Quality of analytics in Big Data;
- Reuse in the context of processes (process lines);
- Case studies and experience reports.

PARTICIPANTS

Researchers and practitioners in software reuse, software evolution, emerging software systems such as SOA, pervasive computing and embedded software, testing and quality assurance and all other relevant areas. The chairs expect to bring to the workshop researchers and practitioners worldwide from research institutes, universities and industries.

PROGRAM COMMITTEE (To add)

IMPORTANT DATES

March 6, 2016   Workshop paper submission due
March 28, 2016   Decision notification (electronic)
April 7, 2016   All final manuscript and author pre-registration due

SUBMISSION

Papers must be submitted electronically via the QUORS 2016 Submission Page (http://quors.compsac.info , also available at QUORS web site). Please follow the instructions posted on the web site. The format of submitted papers should follow the guidelines for IEEE conference proceedings, i.e., 8.5" x 11", Two-Column Format.

Please follow the IEEE Computer Society Press Proceedings Author Guidelines to prepare your papers. The paper should not exceed 4000 words or 6 pages in IEEE paper format including figures, tables, and references. Any problem, please contact the workshop chair x.liu@napier.ac.uk .

All papers will be reviewed by the program committee according to its originality, significance, correctness, presentation and relevance. We also encourage authors to present position papers on practical studies and experiments, critique of existing work, emerging issues, and novel ideas under development. Papers can be submitted as either regular papers, short papers, or fast abstracts. Acceptance and final category depends on reviewer feedback.

Accepted papers will be published in the workshop proceedings of the 40th IEEE Computer Software and Applications Conference (COMPSAC 2016) by IEEE Computer Society Press, indexed through INSPEC and EI Index (Elsevier's Engineering Information Index), and automatically included in the IEEE Digital Library. At least one of the authors of each accepted paper or fast abstract must register as a full participant of the workshop to have the paper or fast abstract published in the proceedings.

GENERAL INQUIRIES

For QUORS'16, please contact the Workshop Organizers.
For COMPSAC'16, please visit http://compsac.cs.iastate.edu/index.php

WORKSHOP ORGANIZERS

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