



## Special Issue of Software Quality Journal on: "Software Quality in Software-Intensive Systems"

### Guest Editors:

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According to IEEE standards, software-intensive systems are described as “any system where software contributes essential influences to the design, construction, deployment, and evolution of the system as a whole” [IEEE Std 1471:2000] to encompass “individual applications, systems in the traditional sense, subsystems, systems of systems, product lines, product families, whole enterprises, and other aggregations of interest”. [IEEE Std 42010:2011]. Some examples of software-intensive systems are embedded

systems for avionics and automotive applications, large-scale heterogeneous systems, or business applications with special focus on Web services. Software Quality plays a pivotal role when developing and managing software-intensive systems, hence this call for papers.

The topics relevant to this special issue include, but are not restricted to, the following:

### “Embedded Software Engineering” and “Teaching, Education and Training for Dependable Embedded and Cyberphysical Systems”

- Model-based and component-based approaches to embedded software development.
- Embedded software verification and validation.
- Testing and certification of embedded software.

### Model-based Development, Components and Services

- Model-based validation and verification.
- Model evolution and maintenance.
- Quality assurance for models, components, and services.
- Specification, verification, testing and checking of component-based and service-oriented systems.

### Estimation and Prediction in Software & Systems Engineering

- Estimation and prediction approaches used for supporting software engineering tasks and guiding quality assurance
- Estimation and prediction approaches for usage-, product- or process-related quality attributes
- Predicting usage behavior, mobility patterns, and application contexts to support development and maintenance activities

### Software Quality Management: Measurement, Peopleware and Innovation

- Software Measurement and Estimation
- Project Monitoring and control
- Risk- and Quality Management

### **Software Process and Product Improvement**

- Value-Based Software Engineering.
- Quality Assurance, inspection, and testing
- Software process improvement and innovation

Our goal is that this special issue be a collection of different contributions relating to quality-related aspects for developing and managing software-intensive systems.

### **Paper Submission**

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. All papers will be reviewed by at least three reviewers, and must be submitted online using the Editorial Manager. Our online system offers authors the ability to track the review process of their manuscript. This online system offers easy and straightforward log-in and submission procedures, and supports a wide range of submission file formats.

Manuscript should be submitted to: <http://SQJO.edmgr.com>. Choose "S.I.: Software Intensive Systems" as the article type.

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