

Special Issue

Software Verification and Validation for Embedded Systems

Message from the Guest Editor

Verification evaluates intermediary products, such as requirement specification, architectural design, models, or software code, thus ensuring that they comply with previously established requirements for correctness, completeness, and consistency. Embedded systems are electronically controlled devices where software and hardware are tightly coupled. Embedded systems often have unique characteristics that should be reflected in the verification and validation (V&V) plan. In this Special Issue, we are particularly interested in V&V at the software level for embedded systems.

- Methodologies for verification and validation of embedded software
- Techniques for testing of embedded software
- Tools and environment for automated and semi-automated embedded software testing
- Model-based testing
- Software test requirements and architecture
- Static vs. dynamic testing
- Performance, robustness, usability and security testing
- Software fault injection
- Embedded real time software testing and runtime error handling
- Fault localization and debugging
- Empirical studies and experience reports

Guest Editor

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Deadline for manuscript submissions

closed (10 January 2021)



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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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