Special Issue

Software Verification and Validation for Embedded Systems—Volume 2

Message from the Guest Editor

Embedded systems are electronically controlled devices where software and hardware are tightly coupled. The use of machine learning to create anomaly detectors is growing rapidly at the moment. 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 semiautomated embedded software testing
- Model-based testing
- Software test requirements
- Software test 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
- Application of machine learning to anomaly detection for embedded systems
- Empirical studies and experience reports

Guest Editor

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Deadline for manuscript submissions

closed (1 February 2022)



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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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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