

## 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 semi-automated 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

Prof. Dr. Byoungju Choi

Department of Computer Science and Engineering, EWha Womans University, Seoul 03760, Korea

---

### Deadline for manuscript submissions

closed (1 February 2022)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 5.3



[mdpi.com/si/76929](https://mdpi.com/si/76929)

*Electronics*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)





# Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 5.3



[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)



## 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.

---

### Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di  
Torino, 10129 Torino, Italy

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPus /  
SciFinder, Inspec, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Control and  
Systems Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is  
provided to authors approximately 16.4 days after  
submission; acceptance to publication is undertaken in 2.4  
days (median values for papers published in this journal in  
the second half of 2024).