call for papers

SPECIAL SECTION/ISSUE

Title
Towards Self-Healing Systems through Diagnostics, Fault-Tolerance and Design

Editors

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About
We invite papers on new aspects, algorithms and systems related to fault diagnosis, fault-tolerant control and fault-tolerant design. This special publication is the opportunity to present advances in terms of sophisticated design characteristics and control solutions to meet increased performance demands in faulty conditions as well as those concerning reliability and safety requirements. Papers should focus on mathematical, methodical, systemic and algorithmic aspects of technical systems capable of tolerating potential faults in order to improve reliability, safety, and availability while providing desirable performances. Another possible area covers systems which are capable of maintaining overall system stability and acceptable performance in the event of such faults.

Scope
Articles covering theoretical and practical applications related (but not limited) to the following topics are invited:

- advanced fault diagnosis schemes
- fault-tolerant control of continuous as well as discrete time and discrete event systems
- virtual sensors for fault-tolerant control
- application of max-plus algebra for fault-tolerant control
- fault-tolerant control based on model predictive control and linear parameter varying systems
- fault-tolerant control of distributed systems and control reconfiguration
- fault-tolerant design on the functional, physical and geometrical level
- fault-tolerant design employing the concepts of over-actuation, sensor overlap and virtual redundancy
- machinery health monitoring.

Important dates
Submission deadline: ~~30 October 2021~~ **31 December 2021**
Notification of acceptance: **30 March 2022**
Possible publication: **June 2022**

Information for authors

- The papers should meet high quality journal manuscript guidelines, in terms of research results, editorial quality, and language. Poorly written manuscripts will not be considered for review.
- The submission must be done online at `www.amcs.uz.zgora.pl/?action=submission`.
  Important! In your submission (paper file), please put as the first keyword capitalized *FTCD*.
- The papers should be prepared with the journal LaTeX template, following strictly the guide for authors available at `www.amcs.uz.zgora.pl/?action=guide`.
- The submissions will undergo a review process, following the journal rules.
- The final decision will be made by the journal's Editor-in-Chief and Guest Editors.
- Please note that publication in *AMCS* is subject to page charges, invoiced upon paper acceptance. For details, please visit `www.amcs.uz.zgora.pl/?action=guide`.

Technical assistance
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