Special Issue

Development, Reliability, Maintenance and Control of Cyber-Physical Systems

Message from the Guest Editors

Industry 4.0 integrates massively implemented intelligent computing and network technologies for the purpose of automation, reliability and control of systems. Technologies such as the Internet of Things (IoT), cloud computing (CC), big data analytics (BDA), and artificial intelligence (AI) are driving the development of such systems significantly. An important element of intelligent systems are cyberphysical systems (CPS). These systems are networked systems of cyber (computing and communication) and physical (sensors and actuators) components that interact in a feedback loop with possible aid for human intervention, interaction, and use. Topics of interest include but are not limited to the following:

- Smart manufacturing and maintenance;
- Industrial Internet of Things (IIoT);
- Robotics and mechatronic systems;
- Digital twins;
- Multiagent systems (MAS);
- Autonomous systems;
- Human–machine interaction and machine to machine communication (M2M);
- Learning control and cognition;
- Artificial intelligence and data mining;
- Predictive maintenance;
- Reliability and risk assessment.

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Deadline for manuscript submissions

30 November 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/97766

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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