

## Special Issue

# Advancing Engineering Diagnostics through Innovative Mathematical and AI Approaches

### Message from the Guest Editors

We invite researchers from around the globe to contribute to this Special Issue, which focuses on solving the scientific and technical challenges present in diagnostics by applying innovative mathematical and engineering approaches. By establishing a platform for engineering researchers and practitioners, we aim to foster collaboration in the field of technical diagnosis, merging various disciplines such as automatic control, systems, measurements and signal processing, and computer networks. Via the application of mathematical theories, practical modeling and identification tools, and the utilization of artificial intelligence, we seek to address a wide range of diagnostic aspects, including detection, isolation, localization, identification, diagnostics, reconfiguration, and control. Considering the rapid progress in artificial intelligence, this research topic explores how these advancements have revolutionized diagnostics strategies, particularly in machine fault diagnosis. We also welcome contributions that address emerging challenges, such as industrial diagnosis, computer systems diagnosis, and diverse non-industrial applications.

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### Guest Editors

Prof. Dr. Giansalvo Cirrincione

Prof. Dr. Maurizio Cirrincione

Dr. Rahul Kumar

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### Deadline for manuscript submissions

closed (31 January 2024)



## Applied Sciences

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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