Special Issue

Applied Artificial Intelligence for Industrial Nondestructive Evaluation NDE4.0

Message from the Guest Editors

Deep learning (DL) is currently the most important discipline of Artificial Intelligence (AI). It enables machines to process data, learn patterns, and recognize and classify complex defects. By means of DL, problems whose mathematical descriptions are difficult or impossible can be processed automatically. The NDE community is trending toward the NDE 4.0, and AI, especially DL, is a driver of the paradigm shift in this direction. This Special Issue will publish high-quality, original research papers, in the overlapping fields of:

- Deep learning for NDE image reconstruction;
- Deep learning for data processing (signal or image);
- NDE 4.0 systems with AI as assisting technology;
- Deep learning for NDE data interpretation, including defect recognition;
- Interaction between NDE–personal and AI;
- NDE big data applications, algorithms, and systems;
- Cloud/edge/fog computing for NDE applications;
- Trusted AI for NDE applications;
- Qualification of AI methods for NDE applications: norms, benchmarks, metrics, etc.

Guest Editors

Prof. Dr. Ahmad Osman

1. Fraunhofer Institute for Nondestructive Testing IZFP, 66123 Saarbruecken, Germany
2. School of Engineering, Saarland University of Applied Sciences, 66123 Saarbruecken, Germany

Prof. Dr. Valérie Kaftandjian

Laboratory of Vibration and Acoustics, Mechanical Engineering and Design Department, National Institute of Applied Sciences of Lyon, INSA-Lyon, UR677, CEDEX, 69621 Villeurbanne, France

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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