

Special Issue

Explainable and Transparent AI for Engineering Applications

Message from the Guest Editors

In recent years, the rapid development and widespread application of artificial intelligence (AI) in engineering fields have brought significant advancements. However, the complexity and opacity of many AI models pose challenges in terms of interpretability and trustworthiness. This Special Issue will explore the latest advancements in explainable and transparent AI technologies specifically tailored for engineering applications. We seek contributions that address methodologies, frameworks, and case studies that enhance the interpretability and transparency of AI systems in various engineering domains. Topics may include but are not limited to explainable AI algorithms, model visualization techniques, trustworthiness evaluation, and real-world applications in fields such as automation, robotics, and intelligent systems. This Special Issue will provide a platform for researchers and practitioners to share innovative solutions and insights, enabling the development of more reliable and understandable AI applications in engineering.

- explainable AI
- transparent AI
- engineering applications
- model visualization
- trustworthiness
- intelligent systems

Guest Editors

Dr. Feng Wang

School of Automation, China University of Geosciences, Wuhan 430074, China

Dr. Hasan Tercan

Institute for Technologies and Management of Digital Transformation, Lise-Meitner-Strasse 27, 42119 Wuppertal, Germany

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