Special Issue

Recent Applications of Explainable AI (XAI)

Message from the Guest Editors

Explainable artificial intelligence (XAI) refers to machine learning techniques, or general methods in artificial intelligence, for which the underlying decision logic and outcomes can be explained. It addresses the tradeoff between powerful but opaque machine learning models by shedding light into the black boxes. Thus, XAI are applicable only for verifying that the algorithms work as intended, but also for gaining actionable information, generating new hypotheses, enabling developers, end users, and domain experts to trust the models, deepening our understanding of the hidden (causal) relationship, and ensuring algorithmic fairness. This Special Issue will be dedicated to the latest applications of XAI that make powerful automated decision-making models explainable. All recent and novel applications of XAI are of interest, including but not limited to models in agriculture, astrophysics, biomedicine, crime prevention, digital forensics, eHealth, energy, finances, food production, games, information systems, learning analytics, material science, nanoscience, neuroscience, retail, smart cities, social media, and sports.

Guest Editors

Dr. Mirka Saarela

Dr. Lilia Georgieva

Prof. Dr. Vili Podgorelec

Deadline for manuscript submissions

closed (10 March 2025)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/181940

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

