

Special Issue

AI Horizons: Present Status and Visions for the Next Era

Message from the Guest Editors

This Special Issue aims to explore the evolving role of artificial intelligence (AI) in experimental methodologies across various scientific domains. AI has become a powerful tool for enhancing experimental design, data analysis, and decision-making processes. Its potential to revolutionize research practices and accelerate scientific discovery is immense. The articles in this Special Issue will cover a wide range of topics, including but not limited to: machine learning techniques for experimental design optimization, AI-based data acquisition and analysis, automation of experimental workflows, AI-driven decision-making in experimental settings, and the ethical considerations associated with AI-enabled experiments. The contributions to this Special Issue will provide valuable insights into the benefits and limitations of utilizing AI in experiments, highlighting the potential to improve efficiency, accuracy, and reproducibility in various fields.

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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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