Special Issue

Computational Intelligence for Multimodal Data Modeling and Perception

Message from the Guest Editors

This Special Issue aims to gather cutting-edge research that advances our understanding of how computational intelligence can be applied to the modeling, interpretation, and fusion of heterogeneous sensory data. A central focus is the integration of learning-based algorithms with domain-specific knowledge (e.g., physical laws, sensor characteristics) to enhance perception systems in robustness, adaptability, and real-time performance. We welcome original research articles on, but not limited to, the following topics:

- Multimodal data fusion and signal processing;
- Image analysis and scene understanding;
- Multimodal object detection, segmentation, and tracking;
- Cross-modal representation learning and alignment;
- Embodied intelligence and sensorimotor coordination;
- Efficient learning architectures for multimodal perception.

We particularly encourage works that bridge perception and simulation or offer novel insights into embodied intelligence in multimodal contexts. Researchers in computer vision, AI, robotics, signal processing, and applied mathematics are invited to contribute their latest findings to this Special Issue.

Guest Editors

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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