Special Issue

Advances in AI-Driven Electronics: Applications of Fuzzy Logic and Machine Learning in Control, Signal Processing, and Autonomous Systems

Message from the Guest Editors

The rapid advancements in Artificial Intelligence (AI) and Machine Learning (ML) have transformed various aspects of electronics, enabling systems to become more autonomous, adaptive, and efficient. With the increasing complexity of modern electronic systems, the integration of AI-driven techniques, such as Fuzzy Logic and Machine Learning, has proven to be critical in enhancing control systems, signal processing, and autonomous decision-making. These technologies offer innovative solutions for optimizing electronic systems, improving system performance, and reducing the need for human intervention. This Special Issue focuses on the application of AI methodologies, particularly Fuzzy Logic and ML, in electronics to advance fields such as control engineering, signal processing, autonomous systems, and beyond. We aim to highlight both theoretical and practical contributions that demonstrate the transformative power of AI in enhancing electronic systems and circuits. Contributions related to optimization algorithms, real-time decision-making, and the development of intelligent systems that operate autonomously in industrial and consumer environments are highly encouraged.

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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