Special Issue

Advancements in Symmetry/Asymmetry and Deep Learning for Smart Transportation, Microelectronics, and Photovoltaic Systems

Message from the Guest Editors

Recent years have witnessed a rapid evolution of deep learning, transforming various industries with its powerful capabilities in data analysis and decision-making. This Special Issue aims to explore cutting-edge applications of deep learning in three key areas: smart transportation, microelectronics, and photovoltaic (PV) systems. In the field of intelligent transportation, we focus on leveraging deep learning for traffic flow prediction, autonomous driving perception, and smart city management. In microelectronics, deep learning can be applied to optimize semiconductor design, manufacturing processes, and fault detection. Finally, in the domain of PV systems, we will address topics such as solar energy yield prediction, defect detection in solar panels, and smart grid integration. We invite original research and review articles presenting novel algorithms, architectures, and practical applications in these fields, fostering the exchange of innovative ideas and technical advancements.

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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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