Special Issue

Advances in the System of Higher-Dimension-Valued Neural Networks

Message from the Guest Editors

Neural networks have developed and flourished in aspects such as signal processing, image operation, pattern recognition and so on. Today, the lower-dimension-valued neural networks can no longer meet the increasing demands of the real world. Therefore, systems of higher-dimension-valued neural networks, such as complex-valued, quaternion-valued ones or octonion-valued networks, are gaining traction because they can be applied in more areas. This Special Issue welcomes submissions of original research articles and reviews. Research areas may include (but not limited to) the following: (1) Dynamic analysis for fractional-order neural networks; (2) Dynamic analysis and scientific application for memristor-based neural networks; (3) Stability analysis; (4) Complex-valued neural networks; Quaternion-valued neural networks; Octonion-valued neural networks; (5) Synchronization and controllers; (6) Deep learning theory and applications; (7) Pattern recognition; Image processing (8) Fuzzy logic; (9) Complex systems.

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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 guestedited by leading experts in selected topics of interest.

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