Special Issue

Advances in AI Technology for Remote Sensing Image Processing

Message from the Guest Editors

This Special Issue highlights pioneering research that leverages advanced AI techniques—including deep learning, reinforcement learning, transfer learning, and long short-term memory (LSTM) networks—to transform the processing and analysis of remote sensing data. Emphasis is placed on the application of cutting-edge methods, such as causal analysis and physics-informed machine learning, in remote sensing. Additionally, the Special Issue will explore the development and advancements in knowledge graphs and large-scale foundational models, which are pivotal in enhancing the accuracy and interpretability of remote sensing analyses. These innovations are propelling the automation of remote sensing workflows, enabling efficient and scalable solutions. The Special Issue will also address critical technical challenges in making remote sensing data AI-READY, focusing on improving data quality, enhancing model interpretability, and optimizing computational efficiency. This Special Issue aims to provide a comprehensive overview of how AI is revolutionizing remote sensing, paving the way for more intelligent, automated, and reliable data processing solutions.

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About the Journal

Message from the Editor-in-Chief

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.

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