Special Issue

Recent Advances in Object Detection with Hyperspectral Remote Sensing Data

Message from the Guest Editors

The Special Issue focuses on the latest developments in using hyperspectral imaging for object detection. Hyperspectral data, which spans a broad range of wavelengths beyond the visible spectrum, offers unique advantages for detecting and analyzing objects in diverse environments. The issue highlights how machine learning and deep learning techniques, including statistical approaches, learning-based methods, and other learning paradigms, are enhancing object detection accuracy by addressing challenges like dimensionality reduction and spectral-spatial feature fusion. Research also explores the integration of hyperspectral data with other remote sensing technologies, such as LiDAR and multi-spectral imagery, to provide more detailed insights. Additionally, advancements in real-time processing and cloud-based platforms for large-scale data analysis are discussed as essential for future applications in fields like environmental monitoring, agriculture, urban planning, and defense. Overall, the Special Issue presents state-of-the-art methodologies and emerging trends, offering valuable insights for those involved in hyperspectral remote sensing and object detection.

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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