Special Issue

Advances in Scene Understanding with Hyperspectral Remote Sensing: From Data Benchmarks to Applications

Message from the Guest Editors

Hyperspectral imaging (HSI) has become a powerful modality for acquiring rich spectral and spatial information across a wide range of applications, such as precision agriculture, environmental monitoring, and urban planning. With recent advancements in sensor technology, machine learning, and large-scale data processing, the ability to perform automated scene understanding from hyperspectral imagery has seen remarkable progress. Nevertheless, challenges such as limited data accessibility, insufficient model generalizability, and deployment in real-world conditions continue to hinder its broader adoption. These gaps highlight the need for continued research to translate theoretical advancements into practical, scalable solutions. This Special Issue aims to highlight cutting-edge research in hyperspectral scene understanding, fostering advancements that bridge the gap between theoretical innovation and practical implementation.

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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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