Special Issue

Applications of Advanced Computational Technologies and Algorithms for Spatiotemporal Analysis in the Artificial Intelligence Era

Message from the Guest Editors

Over the past several decades, multiple data sources, such as nighttime light images, high-resolution satellite images, and new social sensing data (real-time and geotagged social media data), have provided novel opportunities for examining the spatial dynamics of land systems (urban, rural, or coupled). At the same time, the rapid development of new technologies, including artificial intelligence-driven machine learning algorithms, multi-agent systems, natural language processing, and cyberinfrastructure, among many others, have fundamentally changed how scholars investigate the dynamics of land systems.This Special Issue aims to explore the contributions and sustainability of new computational technologies and algorithms in spatiotemporal analysis and modeling. With advanced computational technologies and algorithms such as AI and cyberinfrastructure, scholars are able to examine, simulate, and predict changes in land systems using big spatiotemporal data. This will provide invaluable information for stakeholders and governments and promote the establishment of a sustainable and healthy future.

Guest Editors

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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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