

## Special Issue

# Ecological Applications of Remote Sensing and Machine/Deep Learning Techniques

### Message from the Guest Editor

This Special Issue aims to gather together articles dealing with quantitative remote sensing approaches that apply multi-spectral, hyper-spectral, multi-angular, synthetic-aperture radar (SAR), or light detection and ranging (Lidar) sensor data from satellite, aerial, or terrestrial platforms to a variety of ecological problems. The issue hopes to cover a wide range of machine/deep learning methods, with the goal of enhancing ecological applications research with data-driven studies, but not limited to the following:

- Spectral analysis of plant communities and functional traits;
- Improved land cover and vegetation mapping;
- Feature engineering and fusion of optical, SAR, and Lidar sensors;
- Convolution, recurrent, and attention learning;
- Semantic segmentation of land cover and vegetation types;
- Distribution modeling and projection of plant communities;
- Land use change modeling and projection;
- Estimating biomass, productivity, and carbon sequestration;
- Post-disaster land use monitoring and management.

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 June 2024)



## Applied Sciences

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## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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