

## Special Issue

# On Board Artificial Intelligence: A New Era for Earth Observation Satellites

### Message from the Guest Editors

The current Special Issue invites contributions on innovative model concepts or improvements of existing AI/ML techniques for space missions, promoting new on-board architectures, or sensors that allow to improve the science of Earth observation through the use of the new hardware accelerators directly on-board AI, such as Intel Movidius Myriad-2 or space-grade FPGA. Potential topics for this Special Issue include but are not limited to the following:

- High-resolution multi-classes segmentation on-board
- High performances CNN on-board
- Recurrent network on-board
- Disaster detection through AI on-board satellite (fire, hurricane, flooding, etc.)
- Vehicle detection through AI on-board satellite (plane, vessel, boat, etc.)
- Generative network for dataset creation
- ML model reduction/quantization techniques

### Guest Editors

Dr. Massimiliano Pastena

European Space Agency/ESTEC, Keplerlaan 1, 2201 AZ Noordwijk, The Netherlands

Prof. Dr. Luca Fanucci

Department of Information Engineering, Università di Pisa, Pisa, Italy

### Deadline for manuscript submissions

closed (15 April 2022)



## Remote Sensing

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Impact Factor 4.1  
CiteScore 8.6



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*Remote Sensing*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[remotesensing@mdpi.com](mailto:remotesensing@mdpi.com)

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## About the Journal

### 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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### Editor-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

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