

Special Issue

Weakly Supervised Deep Learning in Exploiting Remote Sensing Big Data

Message from the Guest Editors

The current remote sensing data acquisition capability can fully meet the requirements of various applications, but the extraction of useful information from remote sensing big data still requires a large research effort. The emerging deep learning methodologies have been introduced in the remote sensing community to mine data, information and knowledge from remote sensing big data, and have achieved better performance than the traditional handcrafted feature-based methods and shallow neural networks. However, one of the major challenges is related to the generation of high-quality labels for samples to be used for the training of deep learning algorithms. Weakly supervised deep learning (WSDL) is a promising solution to address this problem.

Articles may address, but are not limited to, the following topics:

- Deep learning under coarse labels
- Deep learning under noisy labels
- Knowledge graph-guided deep learning
- WSDL-driven remote sensing image retrieval
- WSDL-driven remote sensing image classification
- WSDL-driven remote sensing image object detection
- WSDL-driven remote sensing image change detection
- WSDL-driven remote sensing image vectorization

Guest Editors

Prof. Dr. Yansheng Li

Dr. Xu Tang

Dr. Tian Tian

Dr. Zhihui Zhu

Deadline for manuscript submissions

closed (15 August 2024)



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/131298

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

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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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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

Prof. Dr. Dongdong Wang

Institute of Remote Sensing and Geographic Information Systems, Peking University, Beijing, China

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