



Weakly Supervised Deep Learning in Exploiting Remote Sensing Big Data

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Deadline for manuscript
submissions:

15 August 2024

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





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