Deep Learning Methods for Hyperspectral Image Processing with Limited Labeled Samples

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Message from the Guest Editors

Dear Colleagues,

Owing to abundant spectral and spatial information, hyperspectral images have played a significant role in many applications, such as mineral exploitation, precision agriculture, and climate monitoring. In recent years, deep learning technology has attracted much attention in the field of hyperspectral image processing, because of its powerful non-linear fitting ability. Generally, most of the existing deep learning models are based on supervised learning which demands considerable labeled samples to obtain satisfactory performance. However, the commonly used labeling methods for hyperspectral images, including field investigation and visual interpretation, are costly, time-consuming, and error-prone, thus limiting the number of available training samples.

This Special Issue aims at inviting the manuscripts that propose new deep learning technologies to deal with the small sample problem existing in hyperspectral image processing.

Special Issue

Editor-in-Chief

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Message from the Editor-in-Chief

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