



an Open Access Journal by MDPI

# Multi-Task Deep Learning for Image Fusion and Segmentation

Guest Editors:

## Dr. Doster Timothy J

Pacific Northwest National Laboratory, 1100 Dexter Avenue North, Suite 500, Seattle, WA 98109, USA

#### Dr. Brian Alan Johnson

Natural Resources and Ecosystem Services, Institute for Global Environmental Strategies, Kanagawa 240-0115, Japan

#### Dr. Lei Ma

Department of Geographic Information Science, Nanjing University, Nanjing 210046, China

Deadline for manuscript submissions: closed (31 January 2022)

#### **Message from the Guest Editors**

Dear Colleagues,

Typically, a deep learning model is trained to perform a single task with high accuracy; for example classifying images. Multi-task deep learning is a technique in machine learning where a deep model is trained to perform several tasks (e.g., classify an image, segment out the object, and predict the depth) with different metrics and a collection of shared representations. By training the model across several related tasks, the model develops features which are less prone to overfitting on the training data and thus generalizes better. This technique has shown great success in image and textual analysis. In this special issue, we consider the applicability of this technique to problems arising in remote sensing such as scene segmentation, image fusion, image registration, object detection, super resolution, and anomaly detection.



**Special**sue





an Open Access Journal by MDPI

### **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

#### 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.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

**Journal Rank:** JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

### **Contact Us**

*Remote Sensing* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/remotesensing remotesensing@mdpi.com X@RemoteSens\_MDPI