

Special Issue

Deep Learning Approaches for Urban Sensing Data Analytics

Message from the Guest Editors

Deep Learning (DL) has attracted burgeoning research interest in the past few years, due to its strength in automatic learning of hierarchical features from big data. At the same time, different types of remote sensing, such as satellite and airborne imagery and video systems, as well as ground-level mobile mapping systems (e.g., mobile laser scanning systems) have been widely used in urban environment monitoring and analytics at various scales. In addition, existing sensing infrastructures (e.g., CCTV) can be harnessed to extract new information (e.g., pedestrian/vehicle moving patterns) with the help of DL. Although DL is rapidly gaining popularity in remote sensing (Zhang et al., 2016), we are facing numerous challenges in applying it to urban sensing data, such as noisy training datasets, incompatible spatial scales, dense mixture of image objects, short update intervals, onerous hyper parameter tuning, and limited prior knowledge. All these challenges are requiring us to develop special DL approaches for urban sensing data analytics.

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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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