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Semantic Segmentation Algorithms for 3D Point Clouds

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Deadline for manuscript submissions:

closed (30 June 2023)

Message from the Guest Editors

Semantic segmentation often represents a core part of the point cloud processing workflow. As such, it is currently a hot topic in fields like remote sensing, photogrammetry, and computer vision. The identification of the different elements composing a 3D scene is a challenging task due to the numerous possible scenarios and data types. In this context, there is still a lack of generalisable solutions for all distinct scales and scenarios since the semantic definitions differ according to the considered domain. This Special Issue encourages authors to submit research articles, review articles, or application-oriented reports on the following topics (but not limited to):

- Machine/Deep learning algorithms for point cloud semantic segmentation;
- Instance segmentation;
- Integration of knowledge-based rules within/after the learning process;
- Benchmarking;
- Problems and solutions when dealing with imbalanced classes in a training dataset;
- Generalisation and transferability;
- Interpreting, explaining, and visualising deep learning;
- Best/new loss functions when training deep learning neural networks.











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Message from the Editor-in-Chief

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