Special Issue

Panoptic Segmentation of Tree Scenes from Mobile LiDAR Data

Message from the Guest Editors

This Special Issue focuses on the difficulties in analyzing the spatial structure of forests, using Mobile LiDAR point clouds as an input, or fusing multi-modal data to finely divide individual tree instances. By applying the panoptic segmentation of tree environments, results refine the forest tree models in real 3D scenarios, further serving the scientific greening, green assessment, and resource management of forests. Original research papers are expected to use the recently developed techniques to process a wide variety of remote sensing data for tree and vegetation mapping. High-quality contributions covering (but not limited to) the topics listed below are invited:

- Classification, detection, and segmentation of trees;
- Tree and vegetation inventory;
- Fusion of multi-modal data in vegetation scenes;
- Tree modeling;
- Mapping and monitoring of forests;
- Application of advanced image processing methodologies for mapping forest vegetation;
- Vegetation structural characteristics;
- Inversion of vegetation characteristics using mobile LiDAR data;
- Early detection of forest disturbances;
- Segmentation and reconstruction of non-tree objects in tree scenes.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2024)

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Message from the Editorial Board

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

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