Special Issue

Forestry Robotics and Digital Forest Operations (Special Issue in Collaboration with ICRA 2022 IFRRIA Workshop)

Message from the Guest Editors

The increasing lack of manpower and the progressive abandonment of rural areas and practices such as pastoralism have driven forestry to become increasingly mechanized in order to increase productivity.

This SI will showcase this exciting and important area of application, and presenting recent achievements in research on forestry robotics. It will bring together some of the contributions presented at the IEEE ICRA 2022 Workshop on Innovation in Forestry Robotics: Research and Industry Adoption
(IFRRIA, https://labs.ri.cmu.edu/ifrria-icra-2022/).
Potential topics include, but are not limited to:
-Artificial sensing and perception for forestry robotics;
-Multisensory systems and fusion (LIDAR, depth cameras, multispectral imaging, etc.);
-Neural networks and machine learning approaches (semantic mapping, object detection, dynamic tracking, etc.);
-Inventory, monitoring and wildfire fighting applications;
-Outdoor (semi-)autonomous navigation, traversability and locomotion of UGVs and/or UAVs for robots in the wilderness;
-Planning and decision-making architectures for forestry robotics under high uncertainty;

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2023)

Forests

Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6

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forests

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Message from the Editor-in-Chief

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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