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Applications of Advanced Technologies for Improved Precision in Forest Operations

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Message from the Guest Editors

Forest operations have undergone profound transformations with the integration of advanced technologies to achieve superior precision in decision making. Sensing technologies like lidar, stereo cameras, and radar are crucial to this evolution, collectively contributing to a heightened perception of the forest environment. In tandem with these sensing technologies, advanced global navigation satellite systems (GNSS) ensure the precise location tracking of machines, trees, and infrastructure, forming a foundational element of efficient forest management.

Potential topics include, but are not limited to:

- Use of sensing technology (e.g., lidar, depth/RGB cameras, radar) for improved forest operations
- ML and AI algorithms and applications for tree detection and mapping of the forest operations environment
- Applications of advanced technologies for the location of machines, trees, and infrastructure
- Planning of operations using remote and short-range sensing technology and optimization algorithms
- Impact of driver-assisting sensing technologies on productivity and safety
- Robotic systems and autonomous vehicles guided by sensors

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Special Issue

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Message from the Editor-in-Chief

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