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| **Deep Learning and Machine Learning for Forest Management at Timberlands Ltd., New Zealand: Detecting young trees and satellite change detection** |
| Remote sensing offers cost-efficient and timely solutions for forestry management at various scales. This presentation will demonstrate the applications of remote sensing technologies in forest management at Timberlands Ltd., New Zealand, focusing on the integration of deep learning and UAV (unmanned aerial vehicle) technologies for identifying and mapping young individual trees. These applications are crucial for assessing the survival rate of stands and evaluating the health and vigour of seedlings. Additionally, the presentation will highlight the use of satellite data (Sentinel-2) and machine learning algorithms to detect forest changes, including the identification of harvested areas. Furthermore, we will demonstrate how the results from remote sensing analysis can be visualized in real-time through interactive dashboards, providing timely and valuable information. Through these examples, we aim to illustrate the potential of advanced remote sensing technologies in enhancing forest management practices. |