



Bastien Vandendaele – Post graduate Student



Biography

Bastien Vandendaele holds a bachelor's degree and a master's degree in bio-engineering from the University of Liège-Gembloux Agro-Bio Tech (ULG - Belgium) where he specialized in forest and natural areas management. He completed his master thesis at the University of Sherbrooke on the development of methods for the use of terrestrial lidar in forest inventories. Passionate about new digital technologies, he is currently completing a Ph.D thesis at the University of Sherbrooke in collaboration with the NHRI, ULG and FPIInnovations on the use of UAV-based lidar data in precision forestry.

Bastien's work at NHRI?

Bastien is currently working on the Digital Timberlands initiative at NHRI. He is working to improve the use of UAV-based lidar and mobile terrestrial lidar data to support wood harvesting operations. His work involves developing methods for extracting structural attributes at the scale of individual trees from high-density lidar point clouds. His involvement will provide a better understanding of the potential and limitations of these new mobile sensors, with the objective of integrating them into the next generation of enhanced forest inventories.



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Key Responsibilities

- Research and development within NHRI's Digital Timberlands Initiative.
- Scientific advisor on the potential and limitations of new mobile sensors used in generating data to produce next generation enhanced forest inventories.
- Improving the use of UAV-based lidar and mobile terrestrial lidar data to support wood harvesting operations.
- Developing methods for extracting structural attributes at the scale of individual trees from high-density LiDAR point clouds.

Expertise

- LiDAR technology;
- Forest inventories;
- GIS and mapping;
- Photogrammetry;
- Dendrometry.

