AVAILABLE PH.D. POSITION IN GEOMATICS AT LAVAL UNIVERSITY

Deriving structural parameters in Boreal forests using terrestrial lidar scanning

The Digital Forest Lab at Laval University in Quebec has an opening for a PhD student in lidar remote sensing of forests. The successful candidate will conduct research on deriving structural parameters in Boreal forests using terrestrial lidar scanning (TLS).

Project background and description:

The project follows up on the lab's ongoing activities towards enabling wider applications and usage of TLS technology in forest science (https://www.sciencedirect.com/science/article/abs/pii/S0378112719306218). The project aims to develop modeling capacities for mapping leaf area index (LAI) and wood biomass of conifer trees in 3D using TLS data. These objectives will be achieved by a combination of field and virtual lab experiments and analyses of lidar and manual measurement datasets. The candidate will join an established research group focusing on remote sensing, lidar, machine learning, and computer modeling, and she/he will collaborate with partners at the Canadian Forest Service.

Qualifications: Applicants should have a degree in geomatics, forestry, environmental science, earth science, geography, or a related field. The ideal candidates will have one or more of the following skills: solid understanding of lidar, computer programming, forest ecology, or ecophysiology, and experience with modeling, field data collection or analysis of large data sets.

Location: Located in the heart of Quebec City (a UNESCO World Heritage City), Laval University is a major university known for its culture of excellence in both research and teaching. The Department of Geomatics Sciences (www.scg.ulaval.ca), which is part of the Faculty of Forestry, Geography and Geomatics (www.ffgg.ulaval.ca), has 14 professors, more than 150 undergraduate students and about 60 graduate students (M.Sc. and Ph.D.). Research activities in the Department are highly interdisciplinary in nature as well as aligned with the global research initiatives of the university and are supported by the Centre for Research in Geospatial Data and Intelligence (www.crdig.ulaval.ca). The Digital Forest Lab (http://digitalforestlab.ulaval.ca) is composed of a cohesive group of motivated students; currently five PhD candidate, one MSc candidate, and two research associates.

PHD ADVISORS

Director

Martin Béland (Géomatique, Fac foresterie, géographie et géomatique, Univ Laval).

Codirector

Jean-François Côté (Service Canadien des forêts, Ressources naturelles Canada).

Start Date and conditions: Position available starting as soon as winter 2023 Semester. This is a 3.5 year fully-funded (20k$/yr) PhD position at Laval University, Quebec, Canada.

- **To Apply: Send a cover letter stating your research interests, cv, copies of academic transcripts, and contact information for three references by email to Prof Martin Beland (martin.beland@scg.ulaval.ca) using the subject heading: PhD in lidar remote sensing.**