

PROFESSOR IN DIGITAL FOREST OPERATIONS

**DEPARTMENT OF WOOD AND FOREST SCIENCES
FACULTY OF FORESTRY, GEOGRAPHY AND GEOMATICS
UNIVERSITÉ LAVAL**

A privileged living environment in the heart of Quebec City, Université Laval is a large university open to the world and recognized for its culture of excellence in teaching and research. Thanks to the Department of Wood and Forest Sciences of the Faculty of Forestry, Geography and Geomatics, Laval University is the only university in Quebec to offer undergraduate programs in forestry and wood engineering that lead to the Québec Order of Forest Engineers or to the Québec Order of Engineers. The Wood and Forest Sciences Department also leads the multi-faculty integrated bachelor's degree in natural and managed environments. It has 33 full-time professors or lecturers, three Research Chairs, three Teaching Leadership Chairs, three major research initiatives, two research centers and more than 500 undergraduate and graduate students. Collaborations with the Departments of Geography and Geomatics, as well as with other faculties, offer interesting opportunities for multidisciplinary research.

Job Description

In accordance with its development plan, the Department of Wood and Forest Sciences is seeking a professor in forestry operations whose teaching and research activities will focus on areas such as:

1. 3D modeling, navigation and digital terrain models (DTM);
2. Development and modeling of forest harvesting methods that minimize impacts on ecosystems;
3. Automated recognition of forest elements from LiDAR images obtained during harvesting operations;
4. Embedded systems for managing manufacturing production in forests;
5. Harvesting biomass for energy production and GHG budgets of forest operations;
6. Forest road network management.

Responsibilities include:

1. Teaching undergraduate and graduate courses in forest operations;
2. Development of new teaching methods or teaching materials;
3. Obtaining research funding from external granting agencies and partners to support the successful candidates research projects;
4. Conducting research and supervising graduate students on topics related to forest operations using digital tools;
5. Participation in departmental, faculty, university and multi-party committees (with the private and public sectors);
6. Close collaboration with professors from the Department of Geomatics;
7. Development of forest operations research at Forêt Montmorency;
8. Collaboration with several existing research groups at Laval University: FORAC, CRDIG, CEF, CRMR.

Selection Criteria

1. Bachelor's degree in forestry or a related discipline and a Ph.D from a recognized university, or be about to obtain one;
2. Have specific expertise in at least three of the areas enumerated above;
3. Have knowledge of the issues related to forest operations in Quebec and elsewhere in the world;
4. Demonstrate teaching and knowledge transfer skills;
5. Demonstrate the ability to establish and maintain partnerships;
6. Be able to obtain research funding from public or private granting agencies;
7. Demonstrate the ability to integrate into multidisciplinary teams;
8. Present a vision for the position and propose concrete actions to achieve it;
9. Be able to communicate in writing and orally in French, or commit to doing so within a year;
10. Be eligible for membership in the Quebec Order of Forest Engineers.

Salary and conditions: according to the collective agreement.

Expected start date: September 1st, 2019

Promoting diversity, the University invites all qualified individuals to apply, particularly women, visible and ethnic minorities, indigenous people and people with disabilities. Priority will be given to those with Canadian citizenship or permanent resident status.

Applicants are requested to send, by e-mail, a cover letter and curriculum vitae, including a list of publications and the names of three references, no later than May 8, 2019 at 5:00 PM to:

Alain Cloutier
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