Eco-Informatics Specialist (Research Professional)

Research project: Réseau d'observation de la biodiversité du Québec (BD-QC)
Location : Faculty of Science, Université de Sherbrooke
Supervisor : Professor Dominique Gravel
Position # 04227
Link : https://www.usherbrooke.ca/emplois/offre/no/04427

Background

The Réseau d'observation de la biodiversité du Québec (BD-QC) is developing an IT infrastructure that will be used to document in real time the state of biodiversity and its changes. The BD-QC Network participates in the collection of new data in the field and integrates the observations of its various partners. Based on advanced data processing techniques such as statistical modelling and artificial intelligence, the visualization tools provide a unique synthesis of the major changes occurring in Quebec's ecosystems.

The BD-QC Network is funded through NSERC's Alliance program and numerous partnerships with government, museums, citizen science, environmental consultants, natural resource industries and conservation organizations.

Working environment

The direction of the BD-QC Network is located in the Faculty of Science at the Université de Sherbrooke and the supervision is carried out by Professor Dominique Gravel of the Department of Biology. The project is conducted in collaboration with researchers from the Université de Montréal and McGill, and researchers from the Government of Quebec at Ministère des Forêts, de la Faune et des Parcs and Ministère de l'Environnement et de la Lutte contre les changements climatiques.

Tasks and Responsibilities

The ecoinformatics specialist will be responsible for overseeing the management of databases on Quebec's biodiversity and the deployment of a web portal that documents changes in biodiversity. Tasks include, but are not limited to:

- Database development and maintenance;
- Deployment of data interaction tools (APIs);
- Preparation of protocols for the creation of Essential Biodiversity Variables;
- Programing pipelines for automatic data analysis;
- Development of web applications for the visualization of scientific data;
- Supervision of data entry and data injection.

Qualifications required

- MSc or PhD in biology, computer science or geomatics.
- Experience in numerical methods applied to biodiversity data.

Other requirements

- Technical skills for data processing with SQL.
- Experience in developing R packages.
- Experience in programming and operation of Application Programming Interface (API).
- Experience using the Git version control system.
- Knowledge in Biodiversity Science.
- Expertise in analytical methods for biodiversity science.
- Be familiar with the standards of reproducibility and interoperability in the management of scientific data.
- Demonstrate work ethics in a collaborative and diverse team.

Working conditions

According to the scales of the collective labour agreement between the Université de Sherbrooke and the Association du personnel administratif et professionnel de l'Université de Sherbrooke (APAPUS-B)".

Full-time employment, 35 hours per week.

Duration of the position: 1 year with the possibility of renewal, annually over 5 years.

Start date: as soon as possible.

*[Please apply](#) online on the website of the University of Sherbrooke.
Include a CV and cover letter in a single pdf to your application.
Applications in French and English will be accepted.*