NIBIO
NORSK INSTITUTT FOR BIOØKONOMI

Jobbnorge ID: 159835
Deadline: 03.01.2019
Website: http://www.nibio.no/
Scope: Fulltime
Duration: Permanent

Research scientist - sensor technology in forestry

Key Information

The department of Forest Technology and Economics now has a vacant position as researcher in application of machine-based sensors for improved forest operations and mapping of the forest environment.

We are looking for a researcher that will focus on how to apply emerging technologies in the forest sector. The candidate should have a strong technical understanding and an interest in the forestry sector.

Initially the candidate will be participating in existing projects but will over time be expected to develop their own research focus and participate in establishing new externally funded projects.

The researcher will become a central part of the newly established Centre for Precision Forestry.

The development of new methods and improvements in sensor technologies will lead to significant changes in the way that data will be collected from forests and information applied in improving operational efficiency. Future forest operations will slowly move towards autonomous machines.

The place of work will be Ås, 30 km south of Oslo.

Main responsibilities

- Participate in ongoing research related to integrating machine-mounted sensors (e.g. laser scanners, cameras, IMU, GNSS) on forest harvesting machines.
- The goal of the machine-mounted sensors will be to map, monitor and document environmental impacts of forest operations, improve efficiency of forest operations and eventually lead toward greater automation of forest operations.
- The candidate should have an interest in how to implement technology developments (robotics, sensors, computer vision, AI) from other sectors into forestry. The focus of this will be dependent of the background and interest of the candidate .
- Publish scientific papers and participate in the general dissemination of project results.
- Develop externally funded research projects and interact with the forest industry.

Professional qualifications (required)

- PhD in a technology related field (e.g. computer science, mechatronics, robotics, computer vision, geometrics, or data science) and an interest in the forest sector
- Programming and scripting in languages such as C, Python, R, or Matlab
- Technical experience with sensors and sensor data
- Experiece in writing and publishing scientific papers
- A strong command of oral and written English is required

Will be evaluated positively

- Experience with ROS for integration of different sensors
- Experience with LiDAR data
- Experience with SLAM and other navigation methods
- Experience with applications / financing of projects
- Knowledge of Norwegian or Nordic forestry

Personal qualifications

- Good interpersonal and communication skills
- Good analytical and problem-solving skills
- Ability to work under pressure and interact with demanding users
- Dedication and enthusiasm to work as part of an ambitious research team
- Ability to collaborate with both internal and external experts with diverse academic backgrounds and skill sets

Salary and benefits
The position is remunerated according to the Norwegian State Salary Scale as Researcher code1109, salary grade 59 - 72 (NOK 515 200 - 658 300 per year), commensurate with qualifications and experience.

Membership in the Norwegian Public Service Pension Fund, which includes a good occupational pension scheme, occupational injury and group life insurance, and low-interest home loans.

Do you need more information?
Contact Dr. Rasmus Astrup, +47 941 51 660, or see website nibio.no

How to apply for the position
Please send your application with CV electronically via the link on this page.
Take diplomas and letters of recommendation with you if invited to an interview, or submit them as an attachment along with the electronic application/CV.

General information
In accordance with the Norwegian Civil Service equal opportunities policy, qualified candidates are encouraged to apply - regardless of age, gender, functional disabilities or national or ethnic background.

NIBIO is an inclusive workplace.

We would like to point out that information about applicants may be subject to public disclosure, in accordance with the Freedom of Information Act (Offentlighetsloven), Section 25. An applicant can request to be exempted from inclusion on a public list of applicants. If the request for confidentiality is denied, the applicant will be notified thereof.

About NIBIO and the Department

NIBIO's activities lie within agriculture, food, climate and the environment. The Institute conducts research and management support, and provides knowledge for use in national preparedness, governmental and district management, industry, and the society at large.

The Forest Technology and Economics department t is part of the Division of Forestry and Forest Resources. The department carries out applied research on forest and natural-resource based value chains and aims is to contribute to increased profitability for forest products and services, within a sustainable framework. Read more about the department here

Additional information

Place of service:
Ås 1430 Ås (Ås Municipality)