

# NILU Digital Technologies

Jobbnorge ID: 254299 Deadline: 1/2/2024

Website: https://www.nilu.no/

Scope: Fulltime

Duration: Permanent

Department of Digital Technologies

# Researcher - Sensor technology for environmental monitoring

### About the position

We are looking for a professional and creative researcher who can solve challenging tasks within sensor technology for environmental monitoring.

The ideal candidate should strengthen NILUs enabling technologies (new sensing technologies, hardware systems for ML/Al driven sensor data acquisition) toward intelligent digitization of sensor data across a broad spectrum of applications.

In addition to technical expertise, we would like our new colleague to have strong interpersonal and communication skills, along with the ability to effectively convey complex technical concepts. While collaboration is key, the role also requires the capability to work independently when needed.

## **Duties of the position**

- Develop and test an optical based sensing prototype.
- Implement independent research and development activities in the field of sensor technology for environmental monitoring.
- To disseminate through scientific publications & to exploit through potential commercialization.
- Proactively contribute to research ideas and proposals
- · Cooperate with other research groups and partners

#### Qualifications

- MSc or Ph.D. degree in relevant field such as Electrical Engineering, Electronic Systems and Instrumentation, Optics, Physics, or similar.
- · Practical experience in implementing sensing prototype.
- Foreign completed degree (MSc. -level) corresponding to a minimum of four years in the Norwegian educational system.
- Fluent in spoken and written English

Experience in one or more of the following items is an advantage:

- Electronic design (PCB design).
- Embedded software-hardware design and testing (microcontrollers, Machine Learning/ Artificial Intelligence-driven sensor data acquisition)
- Programming (such as Python, C/C++, and/or similar)
- · Light theories for environmental sensing
- · Development and testing of optical sensors or other types of sensors

#### We offer

At NILU, we work for our common future. Our research contributes to the fight against climate change and to secure a healthy environment and a sustainably society. This means that work is more than just work: what we do each day makes a difference.

We offer flexible working hours, work-from-home agreements, subsidised fitness training, and excellent pension and insurance schemes. Salary is competitive.

During a working day at NILU, you will encounter:

- An international and interdisciplinary environment with pleasant colleagues from all over the world
- Great creativity and generous sharing of knowledge
- Broad experience and excellent opportunities for professional development
- A global network of partners

Most of our approximately 185 employees work at the main office in Lillestrøm - at Kjeller, a short train ride from Oslo. We also have offices in Tromsø, Trondheim and Gothenburg (Sweden).

#### **Application prosess**

Applications should be admitted as soon as possible and no later than the 1st of January 2024. The application should contain:

- · Application letter including a statement of motivation and research interests
- CV (summarizing education and positions)
- · Copies of educational certificates including grades

We advise foreign applicants to attach an explanation of their University's grading system.

We aim to increase the number of women in the Digital Technologies department; therefore, we encourage women to apply.

For more information about the available position please contact Dr. Tuan-Vu Cao (tvc@nilu.no) for scientific technical inquires and department leader Rune Ødegård (ruo@nilu.no) for general inquires.

## **About us**

At NILU, our greatest strength is our outstanding employees. They contribute to NILU's leading position both nationally and internationally - and to a pleasant working environment.

We do research from pole to pole - from Zeppelin in Svalbard to Trollhaugen in Antarctica. Our research helps increase knowledge about climate change, the composition of the atmosphere, air quality, sustainable transitions and environmental toxins - as well as how all these factors affect health and the environment. Every year, NILU performs hundreds of research commissions, large and small, for public and private customers, in Norway and internationally.

NILU is an independent research foundation with no owners who collect dividends. Instead, all profits are reinvested in operating and developing research services that benefit society. We place great emphasis on open research, open publishing, and open source code - because knowledge is meant to be shared.

At NILU, all employees are equal, regardless of gender, age, disability, creed/philosophy of life, language, cultural differences and sexual orientation. We respect and value individual characteristics, and do not accept any form of discrimination.

### Additional information

#### Place of service:

Instituttveien 18 2007 Kjeller (Lillestrøm Municipality)