Jobbnorge ID: 288319
Deadline: 31.10.2025
Website: http://www.norceresearch.no/
Scope: Fulltime
Duration: Temporary

About NORCE

Would you like to use your knowledge for something that truly matters? At NORCE, you will join a team that delivers important research and sustainable solutions - regionally, nationally, and globally. We are one of Norway's largest research institutes, with over 800 employees in 10 cities along the Norwegian coast. At our organization, knowledge, innovation, and good collaboration are the keys to success. Together with private and public sector, we create value and develop innovative solutions to many of the major challenges facing society.We do this with our expertise and leading position in energy, health, climate, environment, society, and technology. We not only share your passion for knowledge. We combine it with extensive experience, unique breadth, and strong networks that make an impact both nationally and internationally.

We are looking for

Postdoc within energy modelling and automation.

Background for the position

NORCE **Energy Modelling and Automation group** invites applications from highly motivated candidates for a three years postdoc position contributing to cutting edge research in Artificial Intelligence for energy automation systems. This is a fully financed position in the Centre for Research based Innovation DigiWells and focuses on developing safe and trustworthy AI systems for critical applications and associated methods to assess performance and ensure stability in such high-risk AI systems.The group works in close collaboration with industry and national and international universities to address key technological needs for the energy sector. Our approach is to better understand complex physical processes and build knowledge and technology through advanced software solutions, leveraging data analytics and digitalization.The group is recognized globally for its expertise in multiphase flow dynamics in petroleum wells, and has activities also in carbon storage, geothermal energy, sustainable energy systems, and hydrogen value chains. As hosts of the **SFI DigiWells** center and the national research infrastructure **OpenLab Drilling**, we are at the forefront of energy research and innovation, advancing technology to reduce environmental impact and support the global energy transition.

We are looking for a postdoc researcher that will strengthen our research group and join us for the ongoing work in SFI DigiWells, particularly in connection with the activities in the work package on drilling automation and autonomy.

Workplace: Bergen

Short description of the department

NORCE Energy & Technology is a division at NORCE Norwegian Research Centre AS conducting interdisciplinary research, mainly within energy resources. The division has close to 200 scientific employees, organized into four departments, and has offices in Bergen, Stavanger, Haugesund, Kristiansand, Oslo and Tromsø. Research activity in the division has a particular focus on energy savings for the petroleum industry, geological carbon utilization and storage (CCUS) and renewable energy sources, energy systems, and energy storage.

Description of position

The positions will be linked to the research group Energy Modeling and Automation. This group has a world leading research environment in automated / autonomous drilling and has currently 21 researchers with a background in mathematics, physics, cybernetics, computer science and software engineering. We are seeking candidates with a strong background in computer science and software development. The successful candidate will contribute to the development and deployment of advanced computational models and digital tools and work closely with both industry and research partners.

Our competence and close collaboration with the drilling & well industry, has led to groundbreaking research and innovations, such as a fully **autonomous** system for well construction, a center for research-based innovation **DigiWells**, and a national research infrastructure **OpenLab Drilling**.

The group works strategically to apply our expertise in several research areas, with a current focus on petroleum, geothermal energy, CO2 storage, integrated energy systems, and the hydrogen value chain. Our research projects vary in scope from fundamental process understanding to more practical problems with instrumentation and system integration.

Through cross-disciplinary collaboration and focus on energy-efficiency, safety, and sustainability, the group contributes to innovations that minimize environmental impact.

Responsibilities and work tasks

The candidate will be part of a research environment with a culture of conducting high-quality, industry-relevant research and innovation in close collaboration with industry and governmental funding schemes such as the Research Council of Norway. In addition to professional development and knowledge building, the work tasks include dissemination of results and network building.

Qualifications

Professional qualifications within several of the following topics:

- PhD degree in computer science, artificial intelligence, machine learning, cybernetics or a closely related technical field.
- Competence in implementation and evaluation of AI systems.
- Expertise in distributed AI systems, autonomous multi-agent systems, mathematical modelling, formal verification methods, stability metrics, agentic AI and data analytics are an advantage.
- Experience with large datasets, real-time systems, and integration of software solutions can be beneficial.
- Strong programming skills; experience with Python, C# is a strong advantage.

Personal qualities and skills

You must have good collaboration capabilities and be a team player. You must have good execution ability and be able to work purposefully and focused. You must be flexible and have good communication skills both orally and in writing in English.In the assessment, we will place special emphasis on good professional qualifications, but also on personal qualities and skills. We are looking for a person who will be a positive addition to an engaging and inclusive work environment!

What we offer

- Exciting tasks and good colleagues in an internationally leading and recognized professional environment
- Collaboration with staff and students at universities and colleges
- Opportunities to work with challenging research tasks and expand your network together with NORCE
- Interdisciplinary work in teams
- Good opportunities for professional and personal development in an organization that values good performance
- Varied and flexible working day

How to apply

Your application must include

- A motivation letter describing (research) interests and relevant experience
- CV (including publication list)
- Copy of relevant transcripts and diplomas
- Name and contact information of at least 2 reference persons

Application deadline: 31st of October 2025

Candidates are expected to openly offer all relevant information about themselves during the recruitment process. Furthermore, one can expect that background checks can be conducted on all final candidates who may be checked against relevant lists to ensure compliance with applicable export control and sanctions rules. Candidates will be asked to provide information about affiliation to high-risk countries for a security assessment.

Additional information

Contact person:

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Place of service:

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