



Jobbnorge ID: 264968

Deadline: 8/11/2024

Website: <http://www.hvl.no>

Scope: Fulltime

Duration: Fixed Term

This is Western Norway University of Applied Sciences

With about 16,000 students, Western Norway University of Applied Sciences is one of the largest higher education institutions in Norway. A broad range of academic programmes are offered at Bachelor, Master and PhD levels, spread out on five campuses Førde, Sogndal, Bergen, Stord og Haugesund.

Our ambition is to build stronger and more solid academic and research environments that will interact nationally and internationally. The aim is to become a recognized actor on the international higher education arena. Increased international cooperation and engagement in externally funded projects will work towards this goal.

The Faculty of Technology, Environmental and Social Sciences has approximately 300 employees and approximately 3,200 students. The faculty has a broad educational offer at both bachelor's and master's level in engineering and science, as well as PhD education in computer technology. The Mohns Center for Innovation and Regional Development researches innovation and offers master's education in innovation and entrepreneurship. The diving education offers a one-year vocational school education.

The main part of the faculty's activities are in Haugesund, Bergen, Sogndal and Førde.

The faculty's activities are internationally based and take place in close collaboration with regional companies, clusters, health trusts and the public sector, including other institutions in the university and college sector. This applies to research, development, innovation and not least education with student projects at all levels.

PhD Research Fellow in Artificial Intelligence for Multi-Modal Earth Observation

Western Norway University of Applied Sciences, Faculty of Technology, Environmental and Social Sciences has a open position for PhD Research Fellow in Artificial Intelligence for Multi-Modal Earth Observation

About the position:

There is a Ph.D. position available at the Western Norway University of Applied Sciences in Bergen, Norway. The research will focus on using artificial intelligence to analyze satellite images in order to assess the impact of climate change on infrastructure and businesses.

The research will involve developing deep learning models for 3D surface modeling, image segmentation, and object detection in satellite images using various types of imagery such as SAR, optical, and thermal images. The aim is to create new AI solutions for data fusion and analytics to predict the risk of climate change, natural disasters, and extreme weather events on infrastructure and businesses. Some of the research tasks include analyzing earth observation data using machine learning, integrating various types of observation data, and combining satellite imagery with climate and meteorological data to assess short-term and long-term risks.

For more information, please visit the Ci2Lab webpage and check out Prof. Arghadeh's recent publications on Google Scholar.

About the Research Environment

The Ph.D. candidate will be an integral part of the Connectivity, Information & Intelligence Lab (Ci2Lab) and the Data Science and Artificial Intelligence Group within the Department of Computer Science, Electrical Engineering, and Mathematical Sciences at the Western Norway University of Applied Sciences (HVL).

The increasing digitalization across various sectors emphasizes the growing importance of data science in societal advancement. The HVL Department of Computer Science, Electrical Engineering, and Mathematical Sciences actively contributes to this through high-quality research and education, particularly by establishing the Data Science and Artificial Intelligence Group. The department provides education at the Bachelor, Master, and Ph.D. levels. It is currently undergoing rapid expansion in terms of student numbers, research focus, and staff, with a strong emphasis on AI as a transformative technology.

The position is based in Bergen, the university's main campus. Bergen serves as the Gateway to the Fjords of Norway. As a UNESCO World Heritage City and a European City of Culture, the Bergen region offers an ideal blend of natural beauty, cultural richness, and vibrant urban life throughout the year.

Qualifications:

A master's degree in computer science, electrical or civil engineering, physics, applied mathematics, or other related fields is required.

- Practical Python programming skills are a requirement.
- A background in machine learning and data analysis is necessary.
- Knowledge in any area of remote sensing is a plus.
- A background in signal and image processing and GIS is also a plus.

Candidates who have submitted a master's thesis (but who have not yet been awarded a master's degree) may also qualify for the position, provided that the master's degree is awarded four weeks after the application deadline.

In addition to the required educational and technical background, we will consider the following aspects during the evaluation:

- Competence and grades on completed coursework
- Quality of the master's thesis (excellent grade, the equivalent of grade B or better on the ECTS grading system)
- Publications, research, and industrial experience (if any)
- Proficiency in both written and oral English
- Personal and relational qualities, in addition to ambitions and potential

The candidate must be diligent and display the ability to work independently, supplemented with regular guidance, and is expected to carry out high-quality research and publish the results in international conferences and journals.

The Ph.D. research fellow must enroll in the Ph.D. program in Computer Science: Software Engineering, Sensor Networks, and Engineering Computing program at Western Norway University of Applied Sciences and meet the formal admission requirements for admission into the Ph.D. program. Normally the candidate apply for enrolment within three (3) months after the start of the employment according to Regulations relating to programmes of study and examinations at Western Norway University of Applied Sciences HVL § 2-4.

The PhD Research Fellow's tenure is four years, of which 25 percent each year comprises required duties associated with research, teaching, and dissemination of results. The work location is Bergen, Norway.

Application procedure:

Applications will be evaluated by an expert panel of three members.

Applicants are asked to submit their application and CV online. Please use the link "Apply for this job" ("Søk stillingen").

The following documentation should be uploaded as an attachment to the online application:

- A CV including related coursework and academic publications.
- Bachelor's and Master's degree diplomas and transcripts in English.
- Approved proof of English proficiency.
- Master's thesis (if in English) or a one-page abstract for non-English theses.
- A project plan (maximum 2 pages) outlining the proposed topic, motivation, data requirements, choice of theory and method, and the plan for carrying out the project.
- Copies of up to 2 selected academic publications (if applicable).

Applicants should indicate which publications or parts of publications should be given special consideration in the evaluation. If the documents submitted are not in a Scandinavian language or in English, the applicants must submit certified translations of these. The transcripts must specify the topics, the course works, and the grades at the bachelor's and master's degree levels.

Applicants with a degree from a country other than Norway, need to attach a certified translation of the diploma and transcripts of grades to English or a Scandinavian language, in addition to the original documents, if the original is not in any of these languages. It is required that the applicant encloses a recognition document showing that their degree is equivalent to a Norwegian bachelor's degree, master's degree, or PhD. [You can read more about applying for recognition of foreign higher education here.](#)

The Norwegian Directorate for Higher Education and Skills (HK-dir) offers an automatic recognition document for certain degrees from selected countries. If the applicant's degree is covered by the automatic recognition, it will be sufficient to attach this document. [Read more about automatic recognition here.](#)

As the HK-dir application process may take some time it is recommended to apply to HK-dir as soon as possible. If you have not received a recognition document from HK-dir within the application deadline, please enclose documentation from HK-dir showing that they have received your application.

Applicants should note that the evaluation will be based on the documentation submitted electronically via Jobbnorge within the submission deadline. The applicants are responsible for ensuring that all the documentation is submitted before the closing date. It is of utmost importance that all publications to be considered in the evaluation are uploaded as an attachment with the application, since these are sent electronically to the expert panel. Applications cannot be sent by e-mail or to individuals at the college.

Salary:

- Good occupational pension, insurance and loan schemes from The Norwegian Public Service Pension Fund
- Exciting academic environment with the possibility of competence enhancement and development
- Opportunities for training within the working hours

Initial salaries will be offered at grade 54 (code 1017) in the Civil Service pay grade table scale.

There is a compulsory 2 % deduction to the pension fund (see <http://www.spk.no> for more information). The successful applicant must comply with the guidelines that apply to the position at any time.

General information:

The appointment will be made in accordance with the regulations for State employees Law in Norway ("Lov om statens ansatte"). Organizational changes and changes in the duties and responsibilities associated with the position must be expected.

State employment shall reflect the multiplicity of the population at large to the highest possible degree. Western Norway University of Applied Sciences Bergen has therefore adopted a personnel policy objective to ensure that we achieve a balanced age and gender composition and the recruitment of persons of various ethnic backgrounds.

Information about the applicant may be made public even though the applicant has requested not to be named in the list of applicants. The applicant will be notified if his/her request is not respected.

Short-listed applicants will be called in for an interview.

Employed on condition that you are granted a work and residence permit (**must be considered individually**).

Western Norway University of Applied Sciences is subjected to the regulation for export control system. The regulation will be applied in the processing of the applications.

Contacts:

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<https://www.ci2lab.com>

<https://www.hvl.no/ai/>

Inclusion, challenging norms, collaboration

[Homepage](#)

Additional information

Place of service:

Inndalsveien 28 5063 Bergen (Bergen Municipality)