UNIVERSITETET I OSLO

Jobbnorge ID: 294560
Deadline: 3/8/2026
Website: http://www.uio.no/
Scope: Fulltime
Duration: Engagement

PhD Research Fellow in Deep Learning for Medical Imaging and Multi-Modal Data in Cancer Research

About the position

Position as PhD Research Fellow in Deep Learning available at the Department of Informatics.

The fellowship period is three years.

Depending on the candidate and the teaching needs of the department, the fellowship period can be extended either for compulsory work consisting of e.g., teaching and supervision duties and research assistance up top four years.

Starting date no later than October 1, 2026.

No one can be appointed for more than one PhD Research Fellowship period at the University of Oslo.

Place of work is the Department of Informatics at Gaustad, Oslo.

Job description

This position is funded by the Department of Informatics (IFI) at the University of Oslo and is a joint appointment between IFI and the Institute for Cancer Genetics and Informatics (ICGI) at Oslo University Hospital.
ICGI conducts research at the intersection of biomedicine and informatics, using informatics—and in particular artificial intelligence (AI)—to study genetic and epigenetic alterations in cancer. ICGI is recognised for its work in digital pathology, where AI is used to develop new models for improved cancer diagnosis, prognosis, and personalised treatment. It is a multidisciplinary environment with approximately 50 staff members, including developers, researchers and laboratory personnel. Its highly specialised software development group comprises about 20 full-time employees. More information is available at http://www.icgi.no and **http://www.domore.no.**

The position is based in the Digital Signal Processing and Image Analysis group (DSB), Section for Machine Learning, at IFI. DSB has seven full-time and five adjunct positions and carries out research across image analysis and machine learning, as well as in digital signal processing and acoustic imaging. The group includes around 20 postdoctoral researchers and PhD research fellows funded by a range of national and international agencies, as well as from industry.
The successful candidate will work in the established collaboration between DSB and ICGI to develop multimodal deep learning models for predicting prostate cancer aggressiveness. Specifically, digital pathology images and magnetic resonance (MR) imaging will be integrated with clinical data to predict recurrence following surgical removal of prostate cancer. This is expected to enhance risk stratification compared with current approaches and thereby potentially support treatment selection in future clinical practice. The project will explore the use of foundation models and self-supervised learning in this setting and will investigate different techniques for multi-modal integration. The work may also be extended to predicting disease aggressive-ness prior to surgery and to incorporating genetic data into the multimodal prediction models.

What skills are important in this role?

The Faculty of Mathematics and Natural Sciences has a strategic ambition to be among Europe's leading communities for research, education and innovation. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

Required qualifications:

- Master's degree or equivalent in Computer Science, Machine Learning or other re-lated fields
- For applicants with a foreign completed degree (master-level), the university-level education must correspond to a minimum of four years in the Norwegian educational system
- Strong programming skills in at least one machine learning framework (e.g., PyTorch or TensorFlow)
- Fluent oral and written communication skills in English

Desired qualifications:

- Strong theoretical and methodological capacities in machine learning and deep learning
- Experience in one or more of the following is an advantage: medical images includ-ing histopathology, foundation models, multimodal data fusion, self-supervised learning
- Relevant publications in prestigious machine learning or medical venues
- Interest in interdisciplinary collaboration or medical applications of deep learning

Candidates without a master's degree have until June 30, 2026 to complete the final exam.

Language requirement:

- Good oral and written communication skills in English
- English requirements for applicants from outside of EU/ EEA countries and exemptions from the requirements: https://www.mn.uio.no/english/research/phd/regulations/regulations.html#toc8

Grade requirements:
The norm is as follows:

- The average grade point for courses included in the Bachelor's degree must be C or better in the Norwegian educational system
- The average grade point for courses included in the Master's degree must be B or better in the Norwegian educational system
- The Master's thesis must have the grade B or better in the Norwegian educational system

The purpose of the fellowship is research training leading to the successful completion of a PhD degree. For more information see: http://www.mn.uio.no/english/research/phd/

All candidates and projects will have to undergo a check versus national export, sanctions and security regulations. Candidates may be excluded based on these checks. Primary checkpoints are the Export Control regulation, the Sanctions regulation, and the national security regulation.

What are we looking for in you?

Personal skills:

- Ability to work both independently and as part of a team
- Ability to work in a structured manner and swiftly adapting to new tasks
- Excellent communication and collaboration skills
- Positive attitude and ability to handle hectic periods
- Result-oriented and easily motivated to work efficiently
- You are a person who prefers being present at work and actively contributes to the professional and social environment you are a part of

Employment in the position is based on a comprehensive assessment of all qualification requirements applicable to the position, including personal qualifications.

We can offer you

- A pleasant and stimulating work environment
- Good welfare schemes
- Opportunity of up to 1.5 hours a week of exercise during working hours
- A workplace with good development and career opportunities
- Career development programmes
- Membership in the Statens Pensjonskasse, which is one of Norway's best pension schemes with beneficial mortgages and good insurance schemes
- Oslo's family-friendly surroundings with their rich opportunities for culture and outdoor activities
- Salary in position as PhD Research Fellow, position code 1017 in salary range NOK from 550 800 - 595 000, depending on competence and experience. From the salary, 2 percent is deducted in statutory contributions to the State Pension Fund

We need different perspectives in our work

UiO is an open and internationally oriented comprehensive university that strives to be an inclusive and diverse workplace and academic environment. You can read more about UiO's work on equality, inclusion, and diversity at uio.no.

We fulfill our mission most effectively when we draw upon our variety of experiences, backgrounds, and perspectives. We are looking for great colleagues, could you be the next one?

We will do our best to accommodate your needs. Relevant adjustments may include modifications to working hours, task adaptations, digital, technical, or physical adjustments, or other practical measures.

If you have an immigrant background, a disability, or CV gaps (Norwegian), we encourage you to indicate this in the job application portal. We always invite at least one qualified candidate from each group for an interview. In this context, disability is defined as an applicant who identifies as having a disability that requires workplace or employment-related accommodations. For more details about the requirements, please refer to the Employer portal (Norwegian).

The selections made in the job application portal are used for anonymized statistics that all state employers include in their annual reports. More information about gender equality initiatives at UiO can be found here.

We hope you will apply for the position with us.

How to apply

The application must include:

- Cover letter - statement of motivation and research interests
- CV (summarizing education, positions and academic work - scientific publications)
- Transcripts of records, copies of the original bachelor's and master's degree diploma (see below)
- Letters of recommendation can be attached
- Documentation of English proficiency if applicable

- List of publications and academic work that the applicant wishes to be considered by the evaluation committee
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

Application with attachments must be submitted via our recruitment system Jobbnorge, click "Apply for this job". Foreign applicants should attach an official explanation of their University's grading system.

When applying for the position, we ask you to retrieve your education results from Vitnemålsportalen.no. If your education results are not available through Vitnemålsportalen, we ask you to upload copies of your transcripts or grades. Please note that all documentation must be in English or a Scandinavian language.

General information

The best qualified candidates will invited for interviews.

Applicant lists can be published in accordance with Norwegian Freedom of Information Act § 25. When you apply for a position with us, your name will appear on the public applicant list. It is possible to request to be excluded from this list. You must justify why you want an exemption from publication and we will then decide whether we can grant your request. If we can't, you will hear from us.

Please refer to Regulations for the Act on universities and colleges chapter 3 (Norwegian), Guidelines concerning appointment to post doctoral and research posts at UiO (Norwegian) and Regulations for the degree of Philosophiae Doctor (PhD) at the University of Oslo.

The University of Oslo has a transfer agreement with all employees that is intended to secure the rights to all research results etc.

About the University of Oslo

The University of Oslo is Norway's oldest and highest rated institution of research and education with 26 500 students and 7 200 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

The Department of Informatics (IFI) is one of nine departments belonging to the Faculty of Mathematics and Natural Sciences. IFI is Norway's largest university department for general education and research in Computer Science and related topics.

The Department has more than 1800 students on bachelor level, 600 master students, and over 240 PhDs and postdocs. The overall staff of the Department is close to 370 employees, about 280 of these in full time positions. The full time tenured academic staff is 75, mostly Full/Associate Professors.

Additional information

Contact persons:

- Anis Yazid, Professor
  Phone: | E-mail: anisy@uio.no
- Andreas Kleppe, Professor
  Phone: | E-mail: andrekle@ifi.uio.no
- For questions regarding Jobbnorge, please contact HR Adviser Therese Ringvold,
  Phone: | E-mail: therese.ringvold@mn.uio.no

Place of service:

Gaustadalléen 23 B 0373 Oslo (Oslo Municipality)