Jobbnorge ID: 280017
Deadline: 5/23/2025
Website: http://www.uio.no/
Scope: Fulltime
Duration: Temporary

Postdoctoral Research Fellow in Statistics with focus on Causal Machine Learning

About the position

Integreat - the Norwegian Centre for Knowledge-driven Machine Learning at the University of Oslo invites applications for a postdoctoral fellow in causal machine learning. We are looking for a motivated researcher, who values collaboration, inclusivity, and impact, and who is excited to contribute to a supportive and interdisciplinary research environment.

Starting date as soon as possible and upon individual agreement.

The appointment is a fulltime position at the Department of Mathematics and is for a period of three years (10% of the time is devoted to duties like teaching).

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

No one can be appointed twice as a Postdoctoral fellow financed with funds from The Research Council of Norway (NFR).

About Integreat

Integreat - Norwegian Centre for Knowledge-driven Machine Learning is a Centre of Excellence, funded by the Research Council of Norway. Integreat has two branches, one in Oslo (University of Oslo, UiO) and one in Tromsø (UiT The Arctic University of Norway).

Machine learning is the mathematical and computational engine of Artificial Intelligence (AI), and therefore it is a fundamental force of technological progress in our increasingly digital, data- and algorithm-driven world. Integreat develops theories, methods, models, and algorithms that integrate general and domain-specific knowledge with data, laying the foundations of next generation machine learning. We do this by combining the mathematical and computational cultures, and the methodologies and theories, of statistics, logic, language technology, ethics and machine learning, in new and unique ways.

The focus of Integreat is to develop ground-breaking methods and theories, and therefore solving fundamental problems in science, technology, health and society. Integreat draws on the research strengths of researchers and students from the departments of Mathematics, Informatics, Philosophy, and the Oslo Centre for Biostatistics and Epidemiology at UiO, the Norwegian Computing Centre (NR) and the ML group at UiT, with members from the departments of Physics and Technology, Mathematics and Statistics, and Computer Science.

More about the position

We welcome applicants with a strong background in machine learning, causal inference, and statistics, who are eager to contribute to cutting-edge research at the intersection of these fields. The position is with a strong focus on method development related to causal machine learning. The specific project can be tailored to the applicant's background and interests, but it must be strongly connected to the causal learning research theme of Integreat. Therefore, as part of the application, the candidate is asked to include a project description as a proposal of research to be carried out over the postdoctoral period.

The main purpose of a postdoctoral fellowship is to provide the candidates with enhanced skills to pursue a scientific top position within or beyond academia. To promote a strategic career path, all postdoctoral research fellows are required to submit a professional development plan no later than one month after commencement of the postdoctoral period.

The position is also affiliated with the Statistics and Data Science research group at the Department of Mathematics. The Statistics and Data Science group is active in a wide range of theoretical and applied areas, including inference for high-dimensional data, survival and event history analysis, model selection and criticism, graphical modelling, non-parametric methods, machine learning, hierarchical Bayesian modelling, and time- and space-modelling. The group emphasizes general methodological development, often motivated by real-world challenges in public health, genetics, biology, climate science, and other domains. The successful candidate will benefit from close collaboration across disciplines and access to diverse application areas through the joint environment of Integreat and the Statistics and Data Science group.

Qualification requirements

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.

- Applicants must hold a degree equivalent to a Norwegian doctoral degree in Statistics or a closely related field, with a focus on the methodology of causal inference/learning. Doctoral dissertation must be submitted for evaluation by the closing date. Only applicants with an approved doctoral thesis and public defence are eligible for appointment.
- Solid knowledge about machine learning methodology.
- Fluent oral and written communication skills in English.
- High motivation for a research career, documented primarily via original publications in peer-reviewed scientific journals and machine learning conference proceedings.

We are looking for candidates with the following personal skills:

- Enjoys working both independently and as part of an interdisciplinary team, contributing to a positive and inclusive research environment.
- Approaches challenges with creativity, structure, and a focus on meaningful outcomes.
- Communicates research clearly and confidently, both within the scientific community and to broader audiences.

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 unique research environment with multiple opportunities to develop research themes at the forefront of modern science
- A friendly, inclusive, and collaborative international working environment that values diverse perspectives
- Access to a strong network of top-level national and international collaborators
- A reliable and generous pension agreement, along with strong public benefits
- Comprehensive welfare schemes supporting both personal and professional well-being
- Full access to public health services through membership in the National Insurance Scheme
- A vibrant academic environment with an active and supportive research community
- Structured career development programmes at the faculty level and an individual professional development plan throughout the postdoctoral period
- Mentoring and support structures tailored to early-career researchers
- Flexible working conditions, with understanding for different life situations and family responsibilities
- Research mobility funds supporting short research stays and international collaboration
- Family-friendly surroundings in Oslo and Tromsø, with rich opportunities for culture, nature, and outdoor activities
- A clear institutional commitment to gender equality and diversity, with dedicated initiatives and networks for women in science
- Membership in the Statens Pensjonskasse, which is one of Norway's best pension schemes with beneficial mortgages and good insurance schemes
- Salary in position as Postdoctoral Fellow, position code 1352 in salary range NOK 579 700 - 657 300, depending on competence and experience. From the salary, 2 percent is deducted in statutory contributions to the State Pension Fund

Inclusive worklife and diversity at UiO

Inclusion and diversity are a strength. The University of Oslo has a personnel policy objective of achieving a balanced gender composition. Furthermore, we want employees with diverse professional expertise, life experience and perspectives.

If there are qualified applicants with disabilities, employment gaps or immigrant background, we will invite at least one applicant from each of these categories to an interview.

We hope that you will apply for the position.

More information about gender equality initiatives at UiO can be found here.

Application

Your application should include:

- Cover letter (statement of motivation, summarizing scientific work and research interest)
- Project description on the theme of causal learning (3-6 pages)
- CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- Copies of educational certificates, academic transcript of records
- A complete list of publications and a list of up to 5 academic works that the applicant wishes to be considered in particular by the evaluation committee
- Names and contact details of 2-4 references (name, relation to candidate, e-mail and telephone number)

Application with attachments must be submitted via our recruitment system Jobbnorge, click "Apply for the position".

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.

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, the project description, as well as the candidates motivation and personal suitability. Interviews with the best qualified candidates will be arranged.

It is expected that the successful candidate will be able to complete the project in the course of the period of employment.

Formal regulations

The best qualified candidates will invited for interviews.

Please see the guidelines and regulations for appointments to Postdoctoral fellowships at the University of Oslo.

If an applicant has applied for and been granted funding for a fulltime research stay abroad while being employed as a Postdoctoral Research Fellow, the employment will be prolonged with the equivalent time as the research stay, but for no longer than of twelve months (thus extending the employment to a maximum of four years)

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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.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results a.o.

Contact persons

For further information please contact: Johan Pensar, e-mail: johanpen@math.uio.no or Arnoldo Frigessi, e-mail: frigessi@uio.no

For technical questions regarding the recruitment system please contact: HR-adviser Ole Rustad, e-mail: ole.rustad@mn.uio.no

University of Oslo

The University of Oslo is Norway's oldest and highest ranked educational and research institution, with 26 500 students and 7 200 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

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Additional information

Place of service:

Boks 1072 Blindern 0316 Oslo (Oslo Municipality)