



UNIVERSITETET I BERGEN

**University of
Bergen**
Department of
Informatics

Jobbnorge ID: 265317

Deadline: 8/11/2024

Website: <https://www.uib.no/om/84775/ledige-stillinger-ved-uib>

Scope: Fulltime

Duration: Fixed Term

PhD Research Fellow in Causal Decision Making

UiB - Knowledge that shapes society

Through robust and close interaction with the world around us - globally, nationally and locally - we shall be instrumental in building a society based on knowledge, skills and attitudes.

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Video: <https://www.youtube.com/watch?v=oYaThmlq6Kg>

PhD position in Causal Decision Making

There is a vacancy for a PhD Research Fellow in Causal Decision Making at [the Department of Informatics](#). The position is for a fixed-term period of 3 years with the possibility of a 4 th year with compulsory other work (e.g. teaching duties at the Department).

About the project/work tasks

Causality is a fast-developing area of machine learning, holding the promise to improve artificial reasoning and intelligence. Causal models can provide reliable formal tools to agents and policy-makers to evaluate alternative courses of action and design effective policies.

This project is interested in considering how causal models can be learned and exploited in the context of decision-making. In particular, it will consider the scenario in which one or more learning agents have the possibility of relying on multiple causal models describing their environment. Research will span the space of causality, causal abstraction, causal representation learning and reinforcement learning; the PhD project itself can follow multiple directions, ranging from more theoretical studies on how these models may be related and what guarantees they could provide, to more methodological research on the design of novel algorithms aimed at improving decision-making.

Qualifications and personal qualities

- Applicants must hold a master's degree or equivalent education in computer science, statistics or mathematics, or must have submitted his/her master's thesis for assessment prior to the application deadline. It is a condition of employment that the master's degree has been awarded.
- Strong mathematical background is a requirement.
- Strong programming skills are a requirement.
- Experience with machine learning is an advantage.
- Experience in causality is an advantage.
- Experience in reinforcement learning is an advantage.
- Applicants must be able to work independently and in a structured manner and demonstrate good collaborative skills.
- Applicants must be proficient in both written and oral English

Personal and relational qualities will be emphasized. Ambitions and potential will also count when evaluating the candidates.

Special requirements for the position

The University of Bergen is subjected to the regulation for export control system. The regulation will be applied in the processing of the applications.

About the PhD position

About the PhD Research Fellow: The fellowship will be for a period of 3 years, with the possibility for a 4th year, consisting of 25 % compulsory work (e.g. teaching responsibilities at the department) distributed over the employment period. The 4th year is contingent on the qualifications of the candidate and the teaching needs of the department and will be decided by the head of department upon appointment.

The employment period may be reduced if you have previously been employed in a qualifying post (e.g. research fellow, research assistant).

About the research training: As a PhD Research Fellow, you must participate in an approved educational programme for a PhD degree within a period of 3 years. The deadline for applying for admission to the PhD programme at The Faculty of Mathematics and Natural Sciences is 2 months after you start your position or after the start of the research project that will lead to the PhD degree. It is a condition that you satisfy [the enrolment requirements for the PhD programme](#) at the University of Bergen.

We can offer

- Exciting development opportunities as part of your role in a strong professional environment
- Salary as PhD research fellow (code 1017) in the state salary scale. This constitutes a gross annual salary of NOK 540 500 (equivalent to pay grade 55). Further promotions are made according to qualifications and length of service in the position.
- Enrolment in the Norwegian Public Service Pension Fund
- Good [welfare benefits](#)

Your application must include

- a brief account of the applicant's research interests and motivation for applying for the position, relating explicitly to causality and decision making.
- the names and contact information for two referees. One of these should be the main advisor for the master's thesis or equivalent thesis
- CV
- transcripts and diplomas showing completion of the bachelor's and master's degrees. If you have not yet completed your master's degree, please submit a statement from your institution confirming that the master's thesis has been submitted.
- relevant certificates/references
- a digital copy of the master's thesis if available.
- approved documentation of proficiency in English (if required, cf. [English language requirements for PhD admission](#))
- a list of any works of a scientific nature (publication list)
- any publications in your name

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge

General information

Detailed information about the position can be obtained by contacting:

Associate professor Fabio Massimo Zennaro (fm.zennaro@uib.no), Department of Informatics, or Head of Department Inge Jonassen, Department of Informatics (inge.jonassen@uib.no).

For HR related matters, please contact: Karoline Christiansen (Karoline.Christiansen@uib.no)

Diversity is a strength that enables us to solve our tasks even better. UiB therefore needs qualified employees regardless of gender, ethnicity, religion, worldview, disability, sexual orientation, gender identity, gender expression, and age.

We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

The successful applicant must comply with the guidelines that apply to the position at all times.

We encourage applicants with disabilities, immigrant backgrounds, or gaps in their CV to apply. By indicating such circumstances in your application, you may receive favourable consideration. We ensure that at least one qualified applicant from each of these groups is invited for an interview as part of our commitment to inclusivity and equal opportunity. For further information about the recruitment process, click [here](#).

Life as a PhD candidate at UiB

Marion Claireaux tells about life and work as a PhD candidate at UiB.

Video: <https://www.youtube.com/watch?v=nrt6VxMeJ4&index=2&list=PLf8ZIYfAO0qjhROTj6SthDbSScg0ISO6G>

About UiB

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are seven departments and several centres at Faculty of Mathematics and Natural Sciences. [Read more about the faculty](#) and [departments](#).

Additional information

Contact person:

Karoline Christiansen, HR adviser

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Place of service:

Thormøhlensgate 55 5006 Bergen (Bergen Municipality)