Jobbnorge ID: 235556 **Deadline**: 12/21/2022

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

Scope: Fulltime

Duration: Fixed Term

PhD Research Fellow in Informatics - Didactics

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.

Do you want to take part in shaping the future?

Video: https://www.youtube.com/watch?v=oyaThmlq6Kg

PhD position

There is a vacancy for a PhD Research Fellow in Informatics - Didactics at the <u>Department of Informatics</u>. The position is for a fixed-term period of 4 years.

About the Department

Digitization of businesses, industry, public administration, and education makes informatics play an increasingly important role in the development of society. Research and education in informatics are crucial for the digital transformation of the society to succeed. The Department of Informatics contributes to this through eight research groups that deliver research and education at a high international level in algorithms, bioinformatics, information security, machine learning, optimization, programming theory, visualization and didactics. The department offers education for the future at Bachelor, Master and PhD levels. The department is in rapid growth regarding its number of students, research directions, and employees. We have today about 900 students, and 150 employees from over 30 countries, among which 37 are faculty and 70 PhD candidates. We have established the Center for Data Science (CEDAS) as an important extension of our research and education activities.

About the project/work tasks

Potential thesis topics will relate to questions of equity and diversity in computer science higher education, with a view to identify teaching practices that contribute to inclusion in Computer Science education at UiB. This position will be placed within the didactics research group of the Department of Informatics, with a co-supervisor from the Department of Education. The group with its four permanent staff members is the latest addition to the department's portfolio. You will join one existing PhD candidate who started in 2022, and we're expecting to advertise two further positions in the next years. The group's teaching responsibilities include some of the largest courses at UiB, such as Introduction to Programming, which is taken by all students in the natural sciences faculty. The course has 600-800 students each semester, with 50 TAs from older semesters taking an important part in the teaching activities. The frequency of this course, and the numbers involved provide good opportunities for empirical research focused on equity topics.

Some examples of thesis topics are listed below, other related themes in this area of interest are very welcome!

- Analysis of the impact of assessment design with regard to gender differences in: test performance, experiences of study, and identification with the discipline in CS education.
- How does difference (e.g. age, ethnicity, sexuality, gender identity, class or socioeconomic status, and/or family experience with higher education) affect experiences and outcomes of participating in specific teaching and learning activities or assessments.
- Gender differences in the teaching assistants' practices and interactions within instructional teams.
- · Accessibility and universal design for learning in computer science.
- Investigation and/or comparative analysis of inclusive teaching practices in computer science higher education in Norway / Scandinavia.
- Investigation of other equity issues in instruction, such as material-structural access to machines / lab settings, instructional culture, or hidden curriculum in computer science education.

All employees are expected to contribute to excellence through high quality research and teaching. All PhD candidates at the Department of Informatics are members of the ICT research school research school which offers opportunities to meet other PhD candidates from across the department's research directions. The school has annual meetings, monthly lunches and offers courses on scientific writing and research applications. The holder of this PhD research fellowship will also be associated with the Western Norway Graduate School of Educational Research (WNGER II), which offers doctoral courses, summer schools and other activities, and the opportunity to connect with doctoral researchers focused on several areas of pedagogy and educational research.

Qualifications and personal qualities

- Applicants must hold a master's degree or equivalent education in either informatics, computer science, a related natural science field, or a field related to STEM education. Current Master students can apply, provided they complete their final master exam before 30 April 2023. It is a condition of employment that the master's degree has been awarded.
- Solid experience with a programming language is a requirement; this can be demonstrated through: courses completed at BSc level, relevant work experience, code written for your research, or experience instructing programming courses (including at secondary school level)
- Experience in Python and/or Java is an advantage.
- Experience working in interdisciplinary environments is an advantage.
- Experience with collection, organisation and analysis of qualitative and/or quantitative data is an advantage
- Experience with research related to student learning, pedagogy, equity in education or the scholarship of teaching and learning is an advantage.
- Experience in research methods involving human participants, such as questionnaire design, survey methods, focus groups or interviews 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.
- A good command of Norwegian or another Scandinavian language is an advantage.
- Interpersonal communication abilities will be emphasised. Ambitions and potential will also count when evaluating the candidates.

About the PhD position

The duration of the PhD Research Fellowship is 4 years, of which 25 per cent of the time each year is required duties associated with research, teaching and dissemination of results. 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:

- a good and professionally stimulating working environment
- salary as PhD research fellow (code 1017) in the state salary scale. This constitutes a gross annual salary of NOK 501 200,- (equivalent to pay grade 54). Further increases in salary are made according to length of service in the position.
- enrolment in the Norwegian Public Service Pension Fund
- good welfare benefits

Your application must include

- A brief account (3-5 pages) of your research interests and motivation for applying for the position. Please include:
- Your interests related to both the computer science and education aspects of this position.
- · A discussion of specific research topics or questions that you intend to pursue in the position (include citations where relevant).
- A description of past experience with research in computer science and/or education, and a description of your experience with specific research methods.
- Please also comment on your interest and/or experience within interdisciplinary contexts generally, and this combination of computer science, pedagogy and equity/diversity specifically.
- The names and contact information for two referees. One of these should be the main advisor for the master's thesis or equivalent thesis. If the main advisor is not used as a reference, include a description of why an alternate referee is used.
- 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 the expected date of award of your master's degree. Your master's degree must be documented with transcripts and/or diploma, alternatively a confirmation from your institution on completed degree and your grade, by 30 April 2023.
- · relevant certificates/references
- approved documentation of proficiency in English (cf. English language requirements for PhD admission)
- a list of any works of a scientific nature (publication list), please also include workshops, presentations, conference talks or teaching
 material that you have developed
- any other publications in your name.

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge by 21 December 2022.

General information

For further details about the position, please contact:

Associate Professor David Grellscheid (Dept. of Informatics)

Associate Professor Marie van der Kloet (Dept. of Education)

For HR related matters, please contact Maria Svåsand.

Employment is subject to approval with respect to the Norwegian export control legislation.

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

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. Age and gender balance among employees is therefore a goal. It is also a goal to recruit people with immigrant backgrounds. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

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.

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=nrtp6VxMeJ4&index=2&list=PLf8ZIYfAO0gjhROTj6SthDbSScg0ISO6G

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

Place of service:

Bergen 5008 Bergen (Bergen Municipality)