UiT The Arctic University of Norway
Department of Clinical Medicine

Jobbnorge ID: 283926
Deadline: 9/21/2025
Website: https://uit.no/startsida
Scope: Fulltime
Duration: Fixed Term

Faculty of Health Sciences

Postdoctoral Research Fellow in artificial intelligence for future healthcare solutions

The position

An exciting researcher position is available in the Department of Clinical Medicine in collaboration with the Department of Computer Science at UiT The Arctic University of Norway. The position is funded for a period of three years. The research will be conducted within a thriving research group that has recently received grants of excellence. The main focus will be on voice and language-based artificial intelligence (AI) methods for detecting clinical worsening in mental illness. A preference will be given to those with demonstrated research interests in speech and / or neurotechnologies.

The goal is to contribute broadly to research on applications of AI in medicine, and in particular to the development and validation of novel computational language models, algorithms, and tools for spoken language-based detection of clinical change.

General information about the position:

The position is fixed term for a duration of three years. Appointment to the position of Postdoctoral Research Fellow is mainly intended to provide qualification for work in top academic positions. It is a prerequisite that the applicant can carry out the project over the full course of the employment period. No person may hold more than one fixed term position as a Postdoctoral Research Fellow at the same institution.

Unless special circumstances indicate otherwise, postdoctoral projects shall be planned with stays abroad. The duration should be at least 6 months.

The workplace is at UiT in Tromsø. You must be able to start within reasonable time after receiving the offer

The position's field of research

The postdoctoral researcher position is affiliated with two EU projects (TRUSTING- and DELTA-LANG) that concern themselves with medical applications of speech technologies to prevent clinical worsening in patients with mental illness. We have a large team working on developing technological solutions for these applications. We are seeking a computer science researcher to take an active role in developing novel machine learning based systems and tools on the path towards clinical use and implementation of AI for the treatment and care of patients. The candidate will contribute broadly to enable the development of new algorithms for clinical AI based on patient data from heterogeneous sources notably language/speech-based sources. The activity will focus on the development of a prototype implementation of early warning- and other AI-based decision support systems to study the effectiveness and safety of a novel clinical decision tool that is based on language/speech and utilizes large language models. The research will focus on interaction with clinicians, with a goal of closing the gap between foundational research in machine learning and the clinical use of machine learning methods for the benefit of patients from a healthcare point of view. Hence, the work will be conducted in a highly interdisciplinary research environment and the candidate will collaborate with international teams consisting of clinicians, researchers in science and technology, health, industry partners, as well as personnel responsible for ICT, data security, privacy concerns and more.

Working environment:

The Health Data Lab (HDL) is a research group at the Department of Computer Science at UiT The Arctic University of Norway. HDL's mission is to build and experimentally evaluate the systems, methods, and tools needed to analyze and interpret complex health datasets. The group collaborates with the Psychiatry Research Group at the Department of Clinical Medicine at UiT where NLP methods are used to complement traditional methods of evaluating the mental state of psychiatric patients. We also collaborate with The Norwegian Centre for Clinical Artificial Intelligence (SPKI) at the University Hospital of North Norway. In SPKI, the focus is patient-centered AI, in the sense that implementation and actual use of AI for the benefit of the patients and clinicians is considered to be equally important as the research activity of the SPKI centre. All three research groups are in Tromsø, Norway. The HDL and SPKI research groups are part of the Centre of Research-based Innovation SFI Visual Intelligence that is a center-of excellence in machine learning research. The research groups are also active in entrepreneurship, clinical process innovation, and industry collaboration.

Contact
Further information about the position and UiT is available by contacting:

- Professor Brita Elvevåg: phone +47 91993063; email: brita.elvevag@uit.no
- Professor Lars Ailo Bongo: phone +47 92015508; email: lars.ailo.bongo@uit.no
- Associate Professor Karl Øyvind Mikalsen; phone +47 91565867; email: karl.o.mikalsen@uit.no

General and administrative questions:

- Head of administration (Department of Clinical Medicine) Arvid Inge Paulsen, phone +47 77620894; email: arvid.paulsen@uit.no
- Head of administration (Department of Computer Science) Martin Fjellvang Osima, phone +47 77646244; email: martin.osima@uit.no

Qualifications
The position requires:

- a PhD degree in computer science or a related field
- a publication record that document solid expertise in computer science and interdisciplinary research
- strong technical skills
- good communication skills in English. Documented fluency in English is therefore required. Nordic applicants can document their capabilities by attaching their high school diploma.

If you are at the final stages of your PhD, you may still apply if you have submitted your PhD thesis for evaluation within the application deadline. You must submit the thesis with your application. You must have received your PhD before the start date of the position.

We are looking for applicants with:

- a strong interest and expertise in computer science research with a focus on machine learning methods for the health domain
- strong coding skills
- familiarity with state-of-the-art machine learning frameworks
- previous experience in natural language processing, sound-based machine learning, development and deployment of health technology software .
- interest and previous experience in collaboration with inter-disciplinary or industrial collaboration.

Candidates with research experience and relevant publications in conferences and journals will be considered with higher priority. The position is part of interdisciplinary projects, and close interaction with other project participants will be required.

During this assessment process, emphasis will be placed on your potential for research as evidenced by your thesis and any other academic works. In addition, we may consider work experience or other activities of significance. The assessment will emphasize motivation and personal suitability for the position. We are looking for candidates who:

- are interested, active and highly motivated
- like to explore new technologies
- are independent thinkers but also team players who will enjoy collaborating with other researchers and clinicians

At UiT we put emphasis on the quality, relevance and significance of the research work and not on where the work is published, in accordance with the principles of The San Francisco Declaration on Research Assessment (DORA). UiT wishes to increase the proportion of females in academic positions. In cases where two or more applicants are found to be approximately equally qualified, female applicants will be given priority.

We offer
- Participation in an excellent and thriving research group that has recently received a prestigious ERC Synergy grant
- A productive, collaborative, and stimulating environment with researchers working on cutting-edge medical applications of artificial intelligence and speech technologies
- Good career opportunities
- Flexible working hours and a state collective pay agreement
- Pension scheme through the state pension fund
- The possibility to balance professional development with a location to experience the liberating arctic nature: ski under the northern lights, hike and bike along the fjords

Norwegian health policy aims to ensure that everyone, irrespective of their personal finances and where they live, has access to good health and care services of equal standard. As an employee you will become member of the National Insurance Scheme which also include health care services.

More practical information for working and living in Norway can be found here: https://uit.no/staffmobility

Application
Your application must include:

- Letter of application, including a 1-page summary of your motivation, why you are qualified for this position and how you will strengthen the research activity in the research team
- CV with complete overview of education, supervised professional training, professional experience, and list of scientific publications.
- Description of your academic production, stating which works you consider most important and of relevance to this position. A brief description of the other listed works should also be included to demonstrate breadth of production. These descriptions shall be an attachment to the application

- Description of your software production and links to any open-source code
- Diplomas and transcripts (all academic degrees)
- Documentation of English proficiency
- Contact information to 2-3 references
- Academic works, up to five. The doctoral thesis is regarded as one work

In order to achieve the targeted use of the postdoctoral position, and to strengthen the employee's career development, a development plan must be available no later than three months after the appointment contract is signed. The development plan must be approved by the immediate leader with personnel responsibility.

If you're at the final stages of your PhD, you may still apply if you have submitted your PhD thesis for doctoral degree evaluation within the application deadline. You must submit the thesis with your application. Documentation of your completed PhD degree must be submitted before commencement.

All documentation to be considered **must** be in a Scandinavian language or English. If English proficiency is not documented in the application, it must be documented before starting in the position. We only accept applications and documentation sent via Jobbnorge within the application deadline.

Assessment

The applicants will be assessed by an expert committee. The committee's mandate is to undertake an assessment of the applicants' qualifications based on the written material presented by the applicants, and the detailed description draw up for the position. A copy of the assessment report will be sent to all applicants.

The applicants who are assessed as best qualified will be called to an interview. The interview should among other things, aim to clarify the applicant's motivation and personal suitability for the position. A trial lecture may also be held.

Inclusion and diversity

UiT The Arctic University in Norway is working actively to promote equality, gender balance and diversity among employees and students, and to create an inclusive and safe working environment. We believe that inclusion and diversity is a strength, and we want employees with different competencies, professional experience, life experience and perspectives.

If you have a disability, a gap in your CV or immigrant background, we encourage you to tick the box for this in your application. If there are qualified applicants, we invite least one in each group for an interview. If you get the job, we will adapt the working conditions if you need it. Apart from selecting the right candidates, we will only use the information for anonymous statistics.

General information

The appointment is made in accordance with State regulations and guidelines at UiT. At our website, you will find more information for applicants.

The engagement is to be made in accordance with the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment.

After the appointment you must assume that there may be changes in the area of work

The remuneration for Postdoctoral research fellow is in accordance with the State salary scale code 1352. A compulsory contribution of 2 % to the Norwegian Public Service Pension Fund will be deducted. You will become a member of the Norwegian Public Service Pension Fund, which gives you many benefits in addition to a lifelong pension: You may be entitled to financial support if you become ill or disabled, your family may be entitled to financial support when you die, you become insured against occupational injury or occupational disease, and you can get good terms on a mortgage. Read more about your employee benefits at: spk.no.

The successful candidate must be willing to get involved in the ongoing development of their department and the university as a whole.

UiT wishes to increase the proportion of females in academic positions. In cases where two or more applicants are found to be approximately equally qualified, female applicants will be given priority.

According to the Norwegian Freedom and Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

Eallju - Developing the High North

UiT The Arctic University of Norway is a multi-campus research university and the northernmost university of the world. Our central location in the High North, our broad and diverse research and study portfolio, and our interdisciplinary qualities make us uniquely suited to meet the challenges of the future. At UiT you can explore global issues from a close-up perspective.

Credibility, academic freedom, closeness, creativity and commitment shall be hallmarks of the relationship between our employees, between our employees and our students and between UiT and our partners.

The Faculty of Health Sciences at UiT The Arctic University of Norway represents a newly created entity gathering almost all possible health study programs. This facilitates an unique interdisciplinarity and innovation in health education and research. We work closely with the services in the North to solve tomorrow's challenges.

Read more about us at uit.no/helsefak

Additional information

Place of service:

Hansine Hansens veg 18 9019 Tromsø (Tromsø - Romsa Municipality)