

heFinansiering: PIRC
Instituttilknytning: IFI

Standardtekst – fakta om UiO

Standardintro – fakta om RITMO

Postdoctoral fellowship in Psychology-Inspired Computing for Robot Assistants

A Postdoc Fellowship position (SKO 1352) in psychology-inspired computing for robots is available as a part of the research project [Predictive and Intuitive Robot companion](#) (PIRC) at the [RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion](#), University of Oslo.

RITMO is a Centre of Excellence funded by the Research Council of Norway. This interdisciplinary centre focuses on rhythm as a structuring mechanism for the temporal dimensions of human life. Methods from musicology, psychology, neuroscience, and informatics are combined to study rhythm as a fundamental property that shapes and underpins human cognition, behaviour and cultural expressions.

All RITMO researchers are co-located and work in a unique interdisciplinary constellation, with world-leading competence in musicology, psychology, robotics and informatics. It is expected that all members of the centre contribute to the general activities and collaborations within RITMO. The researchers have access to state-of-the-art facilities in sound/video recording, motion capture, eye tracking, physiological measurements, various types of brain imaging (EEG, fMRI), and rapid prototyping and robotics laboratories.

Job description

The postdoc will work on psychology-inspired computing for robot assistants. The objective of the position is to create prediction methods for proactive planning of future robot actions and to design robot acting mechanisms for adaptive response ranging from quick and intuitive to slower well-reasoned. We combine sensing across multiple modalities with learned knowledge to predict outcomes and choose the best actions. The goal is to transfer these skills to human-robot interaction in home scenarios, including the support of everyday tasks and physical rehabilitation. Thus, it is relevant to work with implementation and research within robot perception and control for the robot tasks. User studies through human-robot interaction experiments are to be performed.

A total of three researchers (PhD fellows and/or senior researchers) are to be hired for the project and will work together. The postdoc will be affiliated with the [Interaction and robotics cluster](#) at RITMO.

The appointment is for a period of three years starting at the latest 1 February 2023. There might be a possibility to extend the appointment to 4 years depending on the qualifications of the recruited candidate, the department's need for teaching, and the centre's need for assistance. The successful candidate is expected to be part of the research environment of RITMO and contribute to strengthening the links between different research areas within the centre.

Qualifications/requirements

- A PhD in computer science, robotics or other relevant field. The applicant is required to document that the degree corresponds to the profile for the post.
- A strong background in programming, as well as machine learning/deep learning and robotics.

- Skills in human activity recognition, working with different types of real-world sensor data, multimodal sensor data processing/classification, addressing ethical challenges, perception and control are considered advantageous.
- Experience with working across disciplines is an advantage.
- Excellent skills in written and oral English.
- The candidate's proposed research project must be closely connected to PIRC and RITMO's research profile.
- Personal suitability and motivation for the position.

The doctoral dissertation must have been submitted for evaluation before the application deadline, and have been approved by the time of appointment.

In assessing the applications, special emphasis will be placed on:

- the applicant's scientific merit, innovation, and research-related relevance to the objectives of PIRC and RITMO
- the quality of the [research outline](#)
- the applicant's estimated academic and personal ability to carry out his/her research within an allotted time frame and contribute to the research objectives of PIRC and RITMO
- excellent collaboration skills and the ability to successfully join in academic teamwork within and across disciplines

We offer

- Salary NOK minimum xxx xxx – xxx xxx per annum depending on qualifications in position as Postdoc (position code 1352)
- a professionally stimulating working environment
- vibrant international academic environment
- [attractive welfare benefits, in addition to Oslo's family-friendly environment with its rich opportunities for culture and outdoor activities](#)
- membership in the Norwegian Public Service Pension Fund (a generous pension agreement)

Applications must include

- Application letter describing the applicant's qualifications and motivation for the position
- Curriculum Vitae (complete list of education, positions, teaching experience, administrative experience and other qualifying activities, including a complete list of publications with links to the full version of published papers)
- Research outline, including relevant research questions and theoretical and methodological approaches (approximately 2-3 pages, see the [template for research outline](#))
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

Diplomas, certificates, doctoral thesis and other academic works will be requested later.

Please note that all documents must be in English or a Scandinavian Language.

The application with attachments must be delivered in our electronic recruiting system, [jobbnorge.no](#).

The short-listed candidates will be invited to an interview.

Formal regulations

See also [Regulations concerning Post-Doctoral Research Fellowships](#).

Following the Freedom of Information Act (Offentleglova) § 25, Chapter 2, information about the applicant may be used in the public list of applicants even if the applicant opts out from the entry in the public application list.

The University of Oslo has an [Acquisition of Rights Agreement](#) for the purpose of securing rights to intellectual property created by its employees, including research results.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

Deadline: 1 October 2022

Contact persons:

Pia Søndergaard

HR HF

Contact information

Professor Jim Tørresen, e-mail: jimtoer@ifi.uio.no, phone +47 22852454

For technical questions regarding the recruitment system, please contact HR Adviser