



The University of Oslo is Norway's oldest and highest ranked educational and research institution, with 28 000 students and 7000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion is financed through the Research Council of Norway's Centre of Excellence Scheme. RITMO combines a broad spectrum of disciplines - from musicology, neuroscience and informatics - to study rhythm as a fundamental property of human cognition, behaviour and cultural expression. The Centre is organized under the Department of Musicology, in close collaboration with the Department of Psychology and the Department of Informatics.



Post-Doctoral Research Fellowship in Machine Learning on Time Series Data

A Post-Doctoral Research Fellowship (SKO 1352) in Machine Learning on Time Series Data is available at [RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion](#) at the 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, behavior and cultural expressions.

All RITMO researchers will be co-located and work in a unique interdisciplinary constellation, with world-leading competence in musicology, psychology and informatics. It is expected that all members of the center 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/project description

The postdoctoral fellow will carry out research on novel machine learning methods for the analysis of time series data relevant for RITMO. This includes a large range of different data types, including audio/video recordings, data from motion and eye tracking systems, physiological sensors, and brain imaging. It will be particularly important to develop new methods for the combined analysis of such multimodal data, overcoming challenges with all its spatial/temporal differences. It is expected that the postdoctoral fellow will work independently, but also participate in several of the different sub-projects of RITMO.

The appointment is for a period of 3 years, starting 15 August 2018. There might be a possibility to extend to 4 years depending on the qualifications of the recruited candidate, the department's need for teaching and the centre's need for lab assistants.

The successful candidate is expected to become part of the research environment/network of RITMO and contribute to its development. The main purpose of postdoctoral research fellowships is to qualify researchers for work in higher academic positions within their disciplines.

Qualifications/requirements

- | A PhD degree or equivalent in informatics, computer science, mathematics, or other relevant fields. The applicant is required to document that the background corresponds to the profile for the post.
- | Strong programming and modelling skills
- | Experience with data pre-processing, feature extraction, and different machine learning techniques (including knowledge about unsupervised, supervised, reinforcement learning, etc.)
- | It is also positive with knowledge of music theory, music information retrieval, and one or more of the data capturing methods mentioned above
- | Excellent skills in written and oral English
- | The candidate's proposed research project must be closely connected to RITMO's research profile
- | Personal suitability and motivation for the position

The doctoral dissertation must have been submitted for evaluation before the application deadline. A prerequisite for appointments is the successful completion of a doctoral degree. No one can be appointed for more than one specified postdoctoral period at the University of Oslo.

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

- | the applicant's scientific merit, innovation, and research-related relevance to the objectives of RITMO
- | the applicant's estimated academic and personal ability to carry out his/her research within an allotted time frame and to contribute to the research objectives of RITMO
- | very good co-operative skills, and the ability to successfully join in academic collaboration within and across disciplines

We offer

- | salary level NOK 490 900 - 569 000, depending on qualifications
- | a professionally stimulating working environment
- | [attractive welfare benefits](#)
- | membership in the Norwegian Public Service Pension Fund

How to apply

Applicants must submit the following attachments with the electronic application, preferably in pdf format:

- | 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 full version of published papers)
- | Research outline, including relevant research questions and theoretical and methodological approaches (approximately 2-3 pages, see [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.

The short-listed candidates will be invited to an interview at the University of Oslo or we will arrange for a video-based interview.

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.

Application deadline: 31 January 2018

Contacts:

[Administrative Coordinator Anne Cathrine Wesnes](#)

[Personnel Adviser Evian Nordstrand](#) (questions on electronic application)

Jobbnorge ID: 144122, Deadline: Wednesday, January 31, 2018