



# Postdoctoral Research Fellow in Machine Learning for Mental Health Care Technology

## Job description

Two positions as a Postdoctoral research fellow is available at the [Robotics and Intelligent Systems \(ROBIN\) group](#), at the Department of Informatics. The position are a part of the Research Council of Norway funded project [Introducing personalized Treatment Of Mental health problems using Adaptive Technology](#) (INTROMAT).

The project - led by Haukeland University Hospital, aims at developing technology that can analyse the user's voice, movement and other properties, and use that for modeling and predicting how these changes with the mental state. Smartphone and wearables are relevant for data collection, and the system should provide the user with appropriate support and follow up schemes.

The fellowship will be for a period of two years. The starting date is preferably no later than 1 September 2019.

No one can be appointed for more than one Postdoctoral Research Fellowship at the University of Oslo.

## More about the position

The Robotics and Intelligent Systems research group focus on adaptive systems research often including biologically inspired methods. We target to apply these methods within robotics, embedded system and applications like robotics and smartphone technology. We are also interested in studying human and robotic motion using motion capture analysis and apply this knowledge in designing adaptive robotic or computing systems.

In this project, we are interested in developing a patient monitoring and support system using smartphone technology and built-in sensors as well as other on-body sensors that are relevant for capturing and classifying human mental state. This is with the goal of providing the user with the right interventions at the right time. Thus, by combining partners with experience in machine learning and mental health research, respectively, we will study how to find the most effective way of monitoring symptoms, adherence and need for therapist guidance across users and problems.

## Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition of being a leading research faculty. Candidates for these fellowships will be selected in accordance with this, and are expected to be in the upper segment of their class with respect to academic credentials.

- Applicants must hold a degree equivalent to a Norwegian doctoral degree in computer science including machine learning/artificial intelligence (other degrees would be considered if qualifications match). The applicant is required to document that the degree corresponds to the profile for the post.
- Thus, applicants should have a strong background in programming and machine learning/artificial intelligence.
- Moreover, knowledge in the fields of human behaviour tracking and analysis, sensor data analysis, biology-inspired techniques, behavior modeling, and app development would be an advantage.
- A number of partners are involved in the project so collaboration skills would also be assessed.
- Fluent oral and written communication skills in English

In the application, please briefly describe your motivation for the position and the relevance of the Master/PhD thesis work and other project work relevant for the position. Applicants for the fellowship should have scientific publications relevant to this position, and both their quantity and quality (impact of the journal(s) and conference(s)) would be important selection criteria.

In summary, the selection of the candidate(s) for the position would be based on relevant knowledge and experience in the areas described above, education results and scientific publications.

## We offer

- salary NOK 515 200 - 597 400 per annum depending on qualifications in position as Postdoctoral Research Fellow (position code 1352)
- a professionally stimulating working environment
- vibrant international academic environment
- [postdoctoral development programmes](#)
- attractive [welfare benefits](#) and a generous pension agreement, in addition to Oslo's family-friendly environment with its rich opportunities for culture and outdoor activities

## How to apply

The application must include

- Application letter
- CV (summarizing education, positions and academic work - scientific publications)
- Copies of educational certificates, transcript of records and letters of recommendation
- The most relevant and important publications and academic work that the applicant wishes to be considered by the evaluation committee (maximum 5)
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

The application with attachments must be delivered in our electronic recruiting system. Foreign applicants are advised to attach an explanation of their University's grading system. Please note that all documents should be in English (or a Scandinavian language).

Interviews with the best qualified candidates will be arranged.

## Formal regulations

The main purpose of post-doctoral research fellowships is to qualify researchers for work in top academic positions within their disciplines.

Please see the [guidelines and regulations](#) for appointments to Postdoctoral fellowships at the University of Oslo.

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.

The University of Oslo has an [agreement](#) for all employees, aiming to secure rights to research results etc.

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

## Contact information

Professor Jim Tørresen, e-mail: [jjimtoer@ifi.uio.no](mailto:jjimtoer@ifi.uio.no), phone +47 22852454

For technical questions regarding the recruitment system, please contact HR Adviser Torunn Standal Guttormsen, phone: +47 22854272, e-mail: [t.s.guttormsen@mn.uio.no](mailto:t.s.guttormsen@mn.uio.no)

## About the University of Oslo

**The University of Oslo** is Norway's oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

**The Department of Informatics (IFI)** is one of nine departments belonging to the Faculty of Mathematics and Natural Sciences. IFI is Norway's largest university department for general education and research in Computer Science and related topics.

The Department has more than 1400 students on bachelor level, 600 master students, and over 240 PhDs and postdocs. The overall staff of the Department is close to 370 employees, about 280 of these in full time positions. The full time scientific staff is 75, mostly Full/Associate Professors.

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