UNIVERSITETET I OSLO

Jobbnorge ID: 149491
Deadline: 4/15/2018
Website: http://www.uio.no/
Scope: Fulltime
Duration: Engagement

PhD Research Fellowship in Biomedical Engineering

Job description

A position as PhD Research Fellow in Biomedical Engineering, is available at The Department of Physics.

If the successful candidate has a good knowledge of one Scandinavian language (Norwegian, Swedish, Danish), the fellowship will be for a period of 4 years, with 25 % compulsory work (teaching at the Department of Physics). Otherwise, the fellowship will be for a period of 3 years, with no compulsory work. Starting date, no later than 01.10.2018.

Project desription

The Research Fellow will be working in a project focusing on automation in clinical healthcare and especially in the operating theatre. The project combines the use of sensor technology, intelligent systems and robotics with the aim of automating routine procedures to save time for clinical personell or procedures that will benefit from the high precision of a robotic system. The candidate will be working with bioimpedance based sensor systems and other technologies in this setting.

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 expected to be in the upper segment of their class with respect to academic credentials.

- The candidate should have a master degree in informatics, cybernetics, electronics or biomedical engineering. The research will contribute to making progress on developing an automated operating room consisting of advanced sensing and robot control systems. Thus, the candidate should have some knowledge and experience in working with such systems, preferably including machine learning and stochastic optimization (AI) methods.
    - The average grade point for courses included in the Master's degree must be B or better in the Norwegian educational system
    - The Master's thesis must have the grade B or better in the Norwegian educational system
    - The average grade point for courses included in the Bachelor's degree must be C or better in the Norwegian educational system

All Ph.D. candidates must demonstrate high English language skills. International applicants must document these skills prior to admission to the PhD programme by passing one of the following tests with these or better grades:

- TOEFL - Test of English as Foreign Language, internet based test (IBT). Minimum total score: 80
- IELTS - International English Language Testing Service. Minimum overall band score: 6.5
- Certificate in Advanced English (CAE) and Certificate of Proficiency in English (CPE) from the University of Cambridge
- PTE Academic - Pearson Test of English Academic. Minimum overall score: 62

Please see here for exemptions to the English requirements: http://www.mn.uio.no/english/research/phd/application/application.html

Candidates without a Master's degree have until 30 June 2018 to complete the final exam.

Other desired qualifications include:

- Knowledge of medical instrumentation and surgical procedures, human-robot interaction, control systems, embedded systems, laws and regulatory conditions, safety aspects of medical engineering, communication, bioimpedance measurements and/or electronics

The purpose of the fellowship is research training leading to the successful completion of a PhD degree.

The fellowship requires admission to the PhD programme at the Faculty of Mathematics and Natural Sciences. The application to the PhD programme must be submitted to the department no later than two months after taking up the position. For more information see: http://www.mn.uio.no/english/research/phd/

Personal skills

- Good analytical skills
- Structured working habits
- Good communication skills
- It is important that the candidate can function well in a multidisciplinary team environment

We offer

- Salary NOK 436 900 - 490 900 per annum depending on qualifications and seniority as PhD Research Fellow, (position code 1017)
- 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:

- Cover letter including a description of scientific interests and the motivation for applying for the position (max. 2 pages)
- CV (summarizing education, work experience and academic work, including any scientific publications and other qualifying activity)
- Copies of educational certificates, transcript of records, and letters of recommendation
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)
- Documentation of English proficiency

The application with attachments must be delivered in our electronic recruiting system, please follow the link "Apply for this job". 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). Applications with documents missing will not be considered further.

Applicants may be called in for an interview.

Formal regulations

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

Please see the guidelines and regulations for appointments to Research 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 appointment may be shortened/given a more limited scope within the framework of the applicable guidelines on account of any previous employment in academic positions.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results etc.

Contact information

Prof. Ørjan Martinsen, email o.g.martinsen@fys.uio.no, ph.: + 47 228 56474

For technical questions regarding the recruitment system, please contact HR Officer Therese Ringvold, e-mail: therese.ringvold@mn.uio.no, phone: +47 22 85 16 06

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 research at the Department covers a broad range of subfields within physics and technology: From space research to medical physics. A good proportion of the research is interdisciplinary, and conducted in close cooperation with

collaborators in Norway and abroad. Education and teaching are other essential activities. We offer a broad range of courses, and the Department is involved in several study programmes at bachelor's and master's level. Some of the best lecturers in Norway are amongst our employees, and we are proud of our prizewinning teaching and learning environment. The Department has 200 employees, of which 50 are permanent scientific positions. On a yearly basis 20 students complete their Ph.D. and 50 finish their M.Sc. degree.

Additional information

Place of service:

Problemveien 7 0313 Oslo (Oslo Municipality)