

Jobbnorge-ID: 148903 Søknadsfrist: Avsluttet

Nettside: Omfang: Varighet:

PhD Research Fellow in Instrumentation and real-time control of long-reach, light-weight arm intended for use offshore

The University of Agder invites applications for a full-time, fixed-term position as PhD Research Fellow in Instrumentation and real-time control of long-reach, light-weight arm intended for use offshore. The candidate will be enrolled in the PhD Programme at the Faculty of Engineering and Science, and be affiliated the Department of Engineering Sciences. The fellowship is for 3 years and the position is located at Campus Grimstad. The preferred start date is August/September 2018.

The Department of Engineering Sciences has more than 110 employees in scientific positions, and more than 1700 students at all levels. A variety of research is being conducted within all the groups Mechatronics, Renewable Energy, Civil Engineering and Industrial Economy, and we also welcome interdisciplinary projects within the department or with other research groups. We have a broad international cooperation and we have a close cooperation with industrial partners and public services in the region. This is a benefit both to teaching and research. The partners contribute with assignments, competence and resources.

Description of the position

This PhD research fellow position is within the field of robotics and the selected candidate will become a member of the research group Robotics and Autonomy at the University of Agder. The position will also be linked to work-package 3 in the research centre SFI Offshore Mechatronics. The selected candidate will work on design, instrumentation and control of electrically actuated, light-weight, long reach robotic arms. The main goal of the project is to reduce oscillations in the arms while following pre-planned trajectories or while manipulating light payloads with large area subject to wind forces. Oscillations may also be induced by base movement, if the robot is mounted on a floating vessel. Suppression of oscillations may be achieved by placing instrumentation and actuation at favourable locations, and by advanced control. Infrastructure in the Norwegian Motion Laboratory will be available for the project.

Requirements and qualifications

The candidate is expected to hold a Master's degree in Mechatronics, or similar, with completed courses in control systems, instrumentation and robotics. The purpose of the fellowship is research training leading to the successful completion of a PhD degree. The chosen candidate must be approved by the PPCE committee at the faculty in order to obtain admission to the PhD study programme at the university.

To be considered for this position, applicants must have either already finished their master's degree during the last five years or have a date for the defense of the master's thesis that will take place not later than summer 2018.

The position places great demands on the applicant's capacity for independent goal-oriented work, ability to concentrate and attention to detail. Applicants will be assessed on the basis of academic background and results, and any previous research and development work. Relevant industrial experience, personal suitability and good teamwork skills will also be emphasized.

Good communication skills and a good command of English is required.

Regarding English skills, please check <u>here</u> to see if an English test is required. Possible categories of applicants from particular countries may be exempted. Please note that the English test requirement applies to applicants from most countries according to the list mentioned above. No other tests will be approved, and certifications/statements cannot replace a test.

Applicants from some countries must document their English proficiency through one of the following tests with the stated results or better:

- TOEFL Test of English as a Foreign Language with a minimum score of 550 on the Paper-based Test (PBT), or 80 on the Internet based Test (iBT)
- IELTS International English Language Testing System, with a result of at least 6.0.

The candidate will be enrolled in the PhD programme at the Faculty of Engineering and Science and the applicant must qualify for admission to this PhD Programme.

As a general rule, the following apply:

- The average grade for courses included in a bachelor's degree (or equivalent) must be C or above
- The average grade for courses included in a master's degree (or equivalent) must be B or above
- The master's thesis (or equivalent) must have the grade B or above.

More information about the programme and a complete list of admission requirements for the PhD programme can be found here.

Further provisions relating to the position as PhD Research Fellow can be found in the "Regulations concerning terms and conditions of employment for the position of Post-doctoral research fellow, research fellow, research assistant and resident".

Personal suitability and good teamwork skills will be emphasized in the evaluation as well as relevant practical experience. Research Fellows are expected to contribute to the active research community at the University.

Applicants must prepare a research proposal (preliminary project description), to be submitted as attachment to the electronic application. The proposal should not extend beyond 2 pages including the literature list, and should present and discuss possible research challenges with a description and tentative approaches and methods to answer the research questions within the presented frame. The proposal should also include a tentative schedule for the PhD project.

Research visits to an external institution or with a national or international partner for part of the period of employment may be anticipated, as indicated in the above text.

Short-listed applicants will be invited for interviews. With the applicant's permission, UiA will also conduct a reference check before appointment.

Remuneration

The position is remunerated according to the State salary scale, code 1017 Research Fellow, salary NOK 436 900 gross per year. A 2 % compulsory pension contribution to the Norwegian Public Service Pension Fund is deducted from the pay according to current statutory provisions.

The Norwegian public service is committed to reflect the diversity of society, and the personnel policy of the University of Agder aims to achieve a balanced workforce. All qualified persons are therefore encouraged to apply for the position, irrespective of cultural background, gender, age or disability.

Appointment is made by the University of Agder's Appointments Committee for Teaching and Research Positions. The successful applicant will have rights and obligations in accordance with the current regulations for the public service.

Application

Submit your application and CV online. Please click on the link "Apply for this job". The following documentation should be submitted as attachments to the online application:

- A letter of application which includes a rationale for applying for the position together with an outline of the applicant's research interests, motivation, background and thoughts related to the proposed project
- · Certificates and/or grades for all post-secondary education, up to and including the bachelor's level
- · Master's degree/higher degree certificate, with a summary of the courses/subjects included in the degree
- · Applicants with a foreign higher education must attach an official description of the grading system used at the issuing institution
- Applicants who are required to document their English proficiency must submit their TOEFL or IELTS test results (these may be
 forwarded after the closing date). An additional assessment of English may be undertaken at the time of interview
- · Summary and links to the applicant's scientific publications if produced
- A short research proposal (preliminary) that sets out background, rationale, recent work and research design for the intended study. This should not extend beyond about 2 pages, but it will form an important part of the evaluation of candidates

Original documents must be presented for verification to the University of Agder. Successful candidates will be asked, normally during the interview, to ensure that the issuing university submits documents in a sealed envelope directly to UiA or provide access to their documents online, which allows UiA to verify the authenticity of these electronic documents via a secure website hosted at the issuing university (contact person at UiA will be provided later for certain candidates).

The applicant is fully responsible for submitting complete documentation. Without complete documentation, we cannot, unfortunately, include you in the assessment process.

All documentation of education must be in the original language and in English, Norwegian, Swedish, or Danish (if the original language is not one of these), the application should include a translation should preferably be from the issuing university. Additional documentation must be in English, Norwegian, Swedish or Danish.

Closing date: 17.06.18

For further information please contact Associate Professor Ilya Tyapin +47 37 23 38 11, e-mail <u>ilya.tyapin@uia.no</u> or Professor Geir Hovland +47 37 23 33 27, e-mail <u>geir.hovland@uia.no</u>.

In accordance with §25(2) of the Freedom of Information Act, applicants may request that they are not identified in the open list of applicants. The University, however, reserves the right to publish the name of applicants. Applicants will be advised of the University's intention to exercise this right.

Tilleggsinformasjon

Arbeidssted: