Post-doctoral Research Fellow in ICT - Deep Learning for Chatbots

About the position

The University of Agder invites applications for a full-time, fixed-term appointment as a Postdoctoral Research Fellow in Information and Communication Technology for a period of two years. The position is currently located in Grimstad, Norway. The starting date is as soon as possible or to be negotiated with the Faculty.

The Department of ICT has three large and active research groups in Information and Communication Technology, including eight Professors, 20 Associate Professors/Assistant professors and about 20 Research Fellows on the PhD programme in ICT. The Department of ICT pursues a variety of research interests, focusing especially on ICT and crisis management, artificial intelligence, eLearning and eHealth. The department has successfully led a number of large research projects funded by the Research Council of Norway, the EU research programmes FP7 and H2020 as well as national and international industries.

Responsibilities

This open position is associated with the Centre for Artificial Intelligence Research and part of the project "Human Chatbot Interaction Design" funded by the Norwegian Research Council.

The aim of the postdoctoral research fellowship is to advance the state-of-the-art in deep learning techniques for chatbots - machine agents serving as natural language user interfaces to data and service providers in social networks. Natural language interaction is the next frontier in the development of ubiquitous data and services, and the research fellow will get the opportunity to develop novel approaches to increase the attention span of deep learning models, thus enabling more goal directed conversations. Furthermore, the candidate will explore and develop mechanisms for leveraging rich contexts, captured through both structured information (demographics, transaction history, etc.) and more unstructured information (e.g., logs of previous dialogue at other contact points). By leveraging a rich context, spanning multiple channels, the ultimate goal is to open up for more intelligent goal-oriented and task-oriented chatbot services. Datasets for training and evaluating the mechanisms developed will be available from several domains, such as private and public sector customer service, and informational services within the health domain.

Research topics for the postdoctoral fellow include, but are not limited to the following:

- Deep learning approaches for conversational user interfaces.
- Combining machine learning and user-centered design for smart chatbot services

The ideal candidate will have expertise in the following areas:

- Deep reinforcement learning
- Transfer- and meta-learning
- Bayesian learning and probabilistic reasoning
- Recurrent neural networks
- Convolutional neural networks
- Natural language processing

Required qualifications

The successful applicant should hold a PhD in a related field (e.g. machine learning, artificial intelligence, data mining). To be considered for the position, applicants must have submitted their PhD thesis by the closing date of the announcement.

Further provisions relating to the position as Post-doctoral Research Fellow can be found in the Regulations Concerning Terms and Conditions of Employment for the post of Post-Doctoral Research Fellow, Research Fellow, Research Assistant and Resident.

Furthermore, the applicant must have:

- Relevant academic credentials
- Written and spoken English proficiency

Personal qualities

Personal suitability, good teamwork skills, inventiveness, and a proactive approach will be emphasized in the evaluation as well as relevant practical experience. The Post-Doctoral Research Fellow will be expected to contribute to an active research community that promotes the personal and professional growth of the doctoral candidate. The position places great demands on the applicant's capacity for independent goal-oriented work, ability to concentrate and attention to detail.

We offer

- professional development in a large, exciting and socially influential organisation
- a positive, inclusive and diverse working environment
- modern facilities and a comprehensive set of welfare offers
- membership of the [Norwegian Public Service Pension Fund](#)

[More about working at UiA](#).

The position is remunerated according to the State salary scale 17.515, code 1352 Post- Doctoral Research Fellow, salary NOK 544 400-658 300 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.

General information

A good working environment is characterised by its diversity. We therefore encourage all qualified candidates to apply for the position, irrespective of gender, age, disability or cultural background. The University of Agder is an IW (Inclusive Workplace).

Women are strongly encouraged to apply for the position.

The successful applicant will have rights and obligations in accordance with the current regulations for the position, and organisational changes and changes in the duties and responsibilities of the position must be expected. Appointment is made by the University of Agder's Appointments Committee for Teaching and Research Positions.

[Read more about the employment process](#).

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

Application

The application and any necessary information about education and experience (including diplomas and certificates) are to be sent electronically. Use the link "**Apply for this job**".

The following documentation must be uploaded electronically:

- CV with a complete list of scientific publications
- Doctoral thesis or link
- Up to five representative publications or links
- A description of the applicant's research interests, the relevance of your expertise to the advertised position and a preliminary work plan

The applicant is fully responsible for submitting complete digital documentation before the closing date. We draw your attention to the fact that we cannot, unfortunately, include you in the assessment process if attachments are missing. All documentation must be available in a Scandinavian language or English.

Application deadline: 31.05.19

Contact

For questions about the position:

- Professor Ole-Christoffer Granmo, tel. +47 37 23 33 57, e-mail ole.granmo@uia.no
- Head of Department Folke Haugland, tel. +47 37 23 32 20, e-mail folke.haugland@uia.no

For questions about the application process:

- HR Advisor Nina Rønningen, tel. +47 38 14 20 16, e-mail nina.ronningen@uia.no

University of Agder

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