Post-Doctoral Research Fellowship in (computational) semantics

Job description
A Post-Doctoral Research Fellowship (SKO 1352) is available at the [Department of Linguistics and Scandinavian Studies](#), University of Oslo.

The Post-Doctoral Research Fellowship is funded by the Norwegian Research Council and is associated with the project Universal Natural Language Understanding. The overall goal of the project is to create semantic representations in the form of Discourse Representation Structures from Universal Dependencies syntax trees, by using both rule-based techniques from Glue Semantics and (neural) machine learning approaches in a process that normalizes the syntax trees, rewrites the nodes as lambda terms in a course-grained, language-independent manner and composes them. In addition, the project will do language-specific enrichment of the resulting semantic representations based on available lexical resources for Norwegian. Prospective applicants who want to know more about the project should contact the PI, Professor Dag Haug.

The postdoc will be part of the project's core team together with a PhD fellow, a research programmer and the PI. The candidate is expected to contribute to building the overall system and to conduct research closely connected to the main project. It is essential for the project that the team as group is competent in both theoretical and computational approaches to semantics.

The candidate will use techniques from theoretical and computational linguistics to explore this structure. Relevant approaches include parsing amino acid sequences with multiple context free grammars based on grammar induction and engineering, semantic analysis of the discovered structures, and grammatical analysis of of individuals' immune repertoires. Much of this work will complement analysis based on deep learning within the project leading to fruitful combination of rule-based and machine learning-based methods. Sequence motifs in the immune system are known to be highly discontinuous and overlapping and an important goal of the project is to develop scaleable techniques for dealing with these phenomena also in natural language.

The position is available for a period of 3 years. There is a 10 % component of the position which is devoted to teaching and administrative duties.

The successful candidate is expected to become part of the research environment/network of the department 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.

Qualification requirements
- PhD or equivalent academic qualifications with a specialization in linguistics or computational linguistics
- Fluent oral and written communication skills in English
- Personal suitability and motivation for the position

The doctoral dissertation must be submitted for evaluation by the closing date. Appointment is dependent on the public defence of the doctoral thesis being approved.

In the evaluation of the applications, emphasis will be placed on:

- The applicant's estimated academic and personal ability to carry out research within the allotted time frame and contribute to the main project
- The need to establish a team with complementary skill sets
- Good co-operative skills, and the ability to successfully join in academic collaboration within and across disciplines

We offer
- Salary NOK 523 200 - 605 500 per annum depending on qualifications
- A professionally stimulating working environment
- Membership in the [Norwegian Public Service Pension Fund](#)
- [Attractive welfare benefits](#)

How to apply
The application must include

- An application letter describing the applicant's qualifications and motivation for the position
- Curriculum Vitae with grades listed (with a list of education, positions, teaching experience, administrative experience and other qualifying activities)
- a statement of research outlining the candidate's previous achievements and future goals for their research and how they fit the the present project
- List of publications
- A writing sample (article or dissertation chapter)
- Code sample/link to github repository if relevant

Please note that all documents must be in English or a Scandinavian language.

Applicants with education from a foreign university must attach an explanation of their university's grading system.

The application with attachments must be delivered in our electronic recruiting system, please follow the link "**apply for this job**".

The short-listed candidates will be invited for an interview.

Formal regulations
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.

Contact information
For questions about the position:

Professor Dag Trygve Truslew Haug

Head of Department Piotr Garbacz

For questions about the recruitment process:

HR Adviser Tonje Olsen

About the University of Oslo

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.

The Department of Linguistics and Scandinavian Studies (ILN) is one of seven departments at The Faculty of Humanities (HF). The department conducts research, teaching and dissemination in general linguistics, Nordic languages (Scandinavian linguistics and Norwegian as a second language), multilingualism, medieval studies (Norse philology and Celtic), Nordic literature (including dissemination of literature and Ibsen-studies), and rhetoric and verbal communication. The Department hosts a socio-cognitive laboratory offering powerful equipment for various types of experiments and studies

Jobbnorge ID: 188459, Deadline: Continuously, Customer reference: 2020/5709