**University of** Bergen Linguistic, Literary and Aesthetic Studies

Jobbnorge ID: 200127 Deadline: 3/5/2021

Website: https://www.uib.no/om/84775/ledige-stillinger-ved-uib

Scope: Fulltime **Duration:** Fixed Term

# Postdoctoral Research Fellow position in Natural Language Processing at MediaFutures: Research Centre for Responsible **Media Technology & Innovation**

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#### Postdoctoral Research Fellow position

The Department of Linguistic, Literary and Aesthetic Studies invites applications for a vacancy for a postdoctoral research fellow position within natural language processing, starting on 1 August 2021 or by appointment. The position is for a period of 3 (4) years and the person hired will conduct research for the project SFI MediaFutures: Research Centre for Responsible Media Technology & Innovation, please see www.mediafutures.no

The Department of Linguistic, Literary and Aesthetic Studies is part of the Faculty of Humanities and is the co-leader of Work Package 5 (Norwegian Language Technologies) in SFI MediaFutures. The department has a wide range of education and research, including bachelor's and master's programmes in Linguistics. Research in Linguistics at the department focuses on sign languages, computational grammar (particularly LFG), corpus methods, experimental psycholinguistics, statistics and machine learning. Positioned a national hub for digital language resources, our research group on Language Models and Resources (LaMoRe) builds and operates research data infrastructures, particularly for treebanking (INESS), and coordinates a national research infrastructure for language (CLARINO). The Linguistic section also manage large collections of data for Norwegian (Språksamlingene) and do lexicographic research and development.

MediaFutures is a new centre for research-based innovation hosted by the Department for information science and media studies, University of Bergen, and will be located at Media City Bergen. The centre is a part of the Norwegian Research Council's Research-based Innovation scheme (SFI). MediaFutures will in cooperation with industry partners from news media and media technology research topics like media experiences, recommender technology, content production and analysis, content interaction and availability, and Norwegian language technology. The goal is to develop responsible technological solutions to societal challenges like AI, fake news, echo chambers and political polarization. The results will be new digital tools, analytical methods and content types for the future of media. The center will also perform research training within media technology and innovation. This will create outputs such as new patents, prototypes, research articles and software, as well and innovative start-up companies.

## About the project/work tasks:

This postdoctoral position will be part of work package WP5 Norwegian Language Technologies, Task 5.2: Robust Deep Language Analysis.

- The postdoctoral fellow will plan and carry out the development of a robust parser for the Norwegian language (Bokmål and Nynorsk) in the news domain. The goal is to produce detailed syntactic and semantic analyses at sentence level, aggregated at text level, which can be fed into content analysis modules elsewhere in the project.
- The applicant is expected to develop the parser primarily based on the treebank NorGramBank, parsed with the NorGram LFG grammar and the XLE parser. This work also includes extending the treebank by parsing media texts from project partners. The successful applicant is expected to contribute with novel ideas on how to approach the tasks, for instance, in dealing with out-of-vocabulary words.
- Upon recruitment, the successful candidate will refine the research tasks in collaboration with project partners and the work package leaders. The successful candidate will disseminate his/her work through scientific papers and conference presentations.

#### Qualifications and personal qualities:

The applicant must hold a Norwegian PhD or an equivalent degree within linguistics, computational linguistics or a related discipline, or must have submitted his/her doctoral thesis for assessment prior to the application deadline. It is a condition of employment that the PhD has been awarded.

- Sound knowledge and experience in syntax, semantics, the computational analysis of language and machine learning of language are requirements for the position.
- A good background in parsing with LFG, in grammar induction and in stochastic methods applied to language are important advantages.
- A strong publication record is an advantage.
- The ability to work independently and in a structured manner, as well as cooperate with others, are prerequisites.
- Proficiency in written and oral English and in written and oral Norwegian is required.

Potential candidates may be invited to the department for an interview.

#### About the position of postdoctoral research fellow:

The postdoctoral fellow will be employed at the Department of Linguistic, Literary and Aesthetic Studies and will be associated with the Research Group on Language Models and Resources. This group performs research and teaching in general linguistics, corpus linguistics, treebanking, language infrastructure, machine learning of language, sign language and psycholinguistics. The workplace will be Media City Bergen.

The position of postdoctoral research fellow is a fixed-term appointment with the primary objective of qualifying the appointee for work in top academic positions. Individuals may not be hired for more than one fixed-term period as a postdoctoral research fellow at the same institution. The fixed-term period for this position is 3 years. There is however the possibility that the department will grant one extra year to be spent on assigned tasks at the department, including teaching.

#### We offer:

- Exciting development opportunities as part of your role in a strong professional environment.
- Salary at pay grade 60 62 (code 1352) on the government salary scale upon appointment (equivalent to NOK 535 200 555 800 per year). Further promotions are made according to length of service in the position.
- · A good and professionally challenging working environment.
- Enrolment in the Norwegian Public Service Pension Fund
- · Good welfare benefits

#### Your application must include:

The application must be sent electronically via the link «APPLY FOR THE JOB» on this page. The applicant must use the electronic CV form, and the application must contain:

- A brief account of the applicant's research interests and motivation for applying for the position.
- The names and contact information for two reference persons. One of these must be the main advisor from the PhD programme.
- CV.
- Transcripts, diplomas and official confirmation that the doctoral thesis has been submitted.
- Relevant certificates/references.
- · List of published scientific works, with links to texts; alternatively, up to 10 works can be attached as pdf files.

The application and appendices with certified translations into English or a Scandinavian language must be uploaded to Jobbnorge. Appendices must be in PDF or Word format.

Applications sent by e-mail will not be evaluated.

#### General information:

Additional information about the position can be obtained by contacting Work Package co-leader Koenraad De Smedt desmedt@uib.no or Centre Director Christoph Trattner christoph.trattner@uib.no.

For more information about moving to Bergen and Norway, please visit <a href="https://www.uib.no/en/node/133625/">https://www.uib.no/en/node/133625/</a>, and <a href="https://www.uib.no/en/hr/74243/what-can-university-bergen-offer-its-employees">https://www.uib.no/en/node/133625/</a>, and <a href="https://www.uib.no/en/hr/74243/what-can-university-bergen-offer-its-employees">https://www.uib.no/en/hr/74243/what-can-university-bergen-offer-its-employees</a>.

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

Further information about our employment process can be found here.

Practical questions about the application process should be directed to fakadm@hf.uib.no.

# About The University of Bergen (UiB)

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are four departments and four centres at Faculty of Humanities. Read more about the faculty and departments.

### **Additional information**

#### Place of service:

Christiesgt. 18 5020 Bergen (Bergen Municipality)