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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

**Faculty of Information Technology and Electrical Engineering
Department of Computer Science**

PhD position in Natural Language Processing for Political Mining (IE-076-2018)

[Norwegian University of Science and Technology \(NTNU\)](#) has a vacancy for a 100% position as a PhD research fellowship affiliated with the [Department of Computer Science \(IDI\)](#) at [Faculty of Information Technology and Electrical Engineering \(IE\)](#)

This position is one of 4 positions within the project Trondheim Analytica, <https://www.jobbnorge.no/ledige-stillinger/stilling/151049>, and <https://www.ntnu.edu/digital-transformation>

The project is in NTNU's strategic portfolio of projects to pursue transformative research on the development and application of digital transformation technology. Multi-disciplinarity is a key objective in all the projects, and close cooperation between the PhD research fellows and the disciplines is essential for Trondheim Analytica

The appointment is for a term of 4 years including 25% teaching assistance.

Information about the department

The Department of Computer Science currently has 24 professors and 14 associate professors. In addition there are 16 adjunct associate professors, 23 postdoctoral researchers, approx. 65 active PhD students, and 18 technical/administrative staff. Five of the tenured scientific positions are held by women, and eight are from other countries than Norway.

Work description

The PhD candidate will investigate how social media users' political emotions and viewpoints can be automatically identified in real-time. Collecting users' posts, references to other posts, and social links between users, the project will seek to uncover textual user features that signal political preferences and align users with respect to pre-defined political and emotional profiles.

The candidate will develop new natural language processing techniques for extracting political viewpoints from social media. This includes using deep learning and language modeling techniques like word embedding to represent text semantics and classify text into political categories. Of particular interest are the challenges related to real-time processing of social media users' content and interpreting short and ambiguous user postings.

Relevant background: A solid background in natural language processing and text analytics is essential, and good programming skills are required. Experience with machine learning, linked data and information retrieval is preferable.

Qualifications

A master's degree in Computer and Information Science or equivalent with very good results is required, with an average grade B or better as measured in ECTS (European Credit Transfer System) grades, or an education at the equivalent level.

Candidates completing their MSc-degree in the Spring 2018 are encouraged to apply. The position is also open for integrated PhD for NTNU students starting their final year of their master degree in Autumn 2018, see <https://www.ntnu.no/ie/forskning/integrertphd> for information about integrated PhD.

The candidates must have excellent analytical and collaboration skills as well as an ability to work independently as well as in team.

Cooperation skills and communication skills are important for the position and will be highly weighted in the selection process.

See here for regulations concerning appointment and promotion to teaching and research posts:

<https://www.regjeringen.no/no/dokumenter/regulations-concerning-appointment-and-promotion-to-teaching-and-research-posts/id2519258/>

Language requirements

The main working languages are Norwegian and English. As the informants are mostly Norwegian, skills in a Scandinavian Language is desired, but not required.

Applicants who do not master a Scandinavian language must provide evidence of good English language skills, written and spoken. The following tests can be used as such documentation: TOEFL, IELTS or Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE). Minimum scores are:

- TOEFL: 600 (paper-based test), 92 (Internet-based test)
- IELTS: 6.5, with no section lower than 5.5 (only Academic IELTS test accepted)
- CAE/CPE: grade B or A.

Formal regulation

Appointments are made in accordance with the regulations in force regarding terms of employment for PhD candidates issued by the Ministry of Education and Research, with relevant parts of the additional guidelines for appointment as a PhD candidate at NTNU. Applicants must undertake to participate in an organized PhD programme of study during their period of employment. The person who is appointed must comply with the conditions that apply at any time to employees in the public sector. In addition, a contract will be signed regarding the period of employment.

Applicants must be qualified for admission as PhD students at NTNU. See <http://www.ime.ntnu.no/forskning/phd> for information about PhD studies at NTNU. Together with the application, include a description of the research work that is planned for completion during the period of the grant.

Salary conditions

The position is in code 1017 Research fellow, and is remunerated at a gross NOK 436.900 - 537.700 per year, depending on qualifications. A deduction of 2% is made as a statutory contribution to the Norwegian Public Service Pension Fund.

General

We can offer

- an informal and friendly workplace with dedicated colleagues
- academic challenges
- attractive schemes for housing loan, insurance and pensions in the Norwegian Public Service Pension Fund

The Faculty of Information Technology and Electrical Engineering wants to attract outstanding and creative candidates who can contribute to our ongoing research activities. We believe that diversity is important to achieve a good, inclusive working environment. We encourage all qualified candidates to apply, regardless of the gender, disability or cultural background. We encourage especially women to apply.

The appointment is subject to the conditions in effect at any time for employees in the public sector, and assessments regarding the legislations regulating export control and knowledge transfer.

Under Section 25 of the Freedom of Information Act, information about the applicant may be made public even if the applicant has requested not to have his or her name entered on the list of applicants.

For further information about the position, please contact Professor Jon Atle Gulla, Email: jon.atle.gulla@ntnu.no.

The application

The application must be sent electronically through this page (www.jobbnorge.no) with information about education and relevant experience (preferably, all in one combined PDF file). Mark the application with the IE code given below.

The application must contain:

- Curriculum vitae (CV) with information about the candidate's prior training, exams, and work experience
- Certified copies of transcripts and diplomas
- Applicants from universities outside Norway are kindly requested to send a diploma supplement or a similar describes in detail the study and grading system and the rights for further studies associated with the obtained degree
- Research statement (max. 3 pages) including:
 - A short presentation of the motivation for a PhD study
 - How the applicant sees his/her background suitable,
 - The applicant's view of research challenges within the area of the PhD position
- Names and contact information of at least 2 reference persons
- A copy of the master thesis (in PDF), or, for those who are near to completion of their MSc, an extended abstract combined with a statement of how and when the applicant plans to complete the thesis (1 page, delivery of master thesis no later than June 30th.)

Incomplete applications will not be considered.

Signing of the employment contract should happen within 01.09.2018.

More information regarding moving to Trondheim, Norway, and working at NTNU: <http://www.ntnu.edu/nirs>

The application deadline is: May 27, 2018

Mark the application: IE-074-2018

Jobbnorge-ID: 151328, Søknadsfrist: Avsluttet