PhD Research Fellowship in statistics

Job description

A PhD research fellowship in statistics and machine learning is available at the Department of Mathematics of the University of Oslo (UiO), Norway.

The fellowship is for a period of 3 years, with starting date to be agreed upon.

This is an opportunity to join one of Europe's most active statistics and data science communities. The Section for Statistics and Data Science at the Department of Mathematics currently includes 9 full time academic positions in statistics, 6 adjunct positions and several PhD students and post doc’s, making up a group of about 30. Statistics at UiO is internationally recognized, with interests spanning a broad range of areas (including high-dimensional and big data, nonparametric inference, algorithmic methods, Bayesian inference, statistical computing, model selection, time-to-event models, space-time models and copula models) and applications (e.g. genomics, sensor data, anomaly and fault detection, text processing). The section has a major role in the center for research-based innovation Big Insight, a consortium of 15 academic, industrial and public partners, with a funding of about 4 million Euro annually in the period 2015-2023. In total, the statistics research community in Oslo includes more than 100 researchers.

The PhD position is part of the Big Insight research activities. Big Insight develops original statistical and machine learning methodologies and analytical and computational tools to extract knowledge from complex and big data, addressed towards innovation.

This particular position is devoted to sequential learning and decision based on sensor data from maritime (ship) data. Sensor data contains both continuous performance measurements and discrete measurements related to different actions that are performed. The former type of data is usually obtained at equidistant time points while the latter can be seen as marked point processes in time. Learning or decisions to be made can be failure detection or rules for maintenance. Methodological development will include both model building and developing inferential tools, including computational methods.

The successful candidate will work on methodological advances in statistics/data science to respond to the challenges in the particular problem. Bayesian methods, state space modelling, and sequential Monte Carlo are some statistical keywords that will be relevant. The PhD research project will be performed in close contact with industrial partners in Big Insight.

The PhD studies at the University of Oslo are characterized by a very strong research component: the PhD thesis usually includes several papers which are published in leading scientific journals, while the candidates are also required to take a small number of advanced courses as part of the training component of their degree.

Big Insight and the University of Oslo offer a lively and socially exciting environment, with a broad visitor program with international guests from the best universities. Generous funding for travelling to conferences and summer schools is available.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition is to be among Europe’s leading communities for research, education and innovation. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

- Master’s degree or equivalent in statistics or a related quantitative subject with proven competence in statistics and mathematics. Candidates without a Master's degree have time until 01.08.2020 to complete the final exam.
- Foreign completed degree (M.Sc.-level) corresponding to a minimum of four years in the Norwegian educational system
- The working language is English and excellent knowledge of spoken and written English is required

The ideal candidates have some experience in statistical and probabilistic methodology, and an outstanding potential and genuine interest to develop statistical methodology that solves key applied problems within the project theme. Excellent programming capacity is required.

We seek highly motivated and skilled persons, able to work effectively as part of a team, who are eager to both gain and share insight while being focused on publishing papers in leading international journals.

Grade requirements:

The minimum norm is as follows:

- the average grade point for courses included in the Bachelor’s degree must be C or better in the Norwegian educational system
- the average grade point for courses included in the Master’s degree must be B or better in the Norwegian educational system
- the Master’s thesis must have the grade B or better in the Norwegian educational system

English requirements for applicants from outside of EU/EEA countries and exemptions from the requirements:

http://www.mn.uio.no/english/research/phd/application/application.html

The purpose of the fellowship is research training leading to the successful completion of a PhD degree.
The fellowship requires admission to the PhD program at the Faculty of Mathematics and Natural Sciences. The application to the PhD program must be submitted to the department no later than two months after taking up the position. For more information see:

http://www.uio.no/english/research/phd/
http://www.mn.uio.no/english/research/phd/

We offer

- Salary NOK 479 600 - 523 200 per annum depending on qualifications in a position as PhD Research fellow (position code 1017)
- Attractive welfare benefits and a generous pension agreement
- Vibrant international academic environment
- Career development programmes
- Oslo’s family-friendly environment with its rich opportunities for culture and outdoor activities

How to apply

The application must include:

- Cover letter, explaining why you are interested in this particular position (max 1 page)
- CV (summarizing education, positions and academic work)
- Copies of educational certificates, transcript of records from both the bachelor and the master degree and letters of recommendation
- Documentation of English proficiency
- List of own publications and academic work that the applicant wishes to be considered by the evaluation committee, including a copy of the master thesis, or a link to it, if available
- Names and contact details of 2 references (name, relation to candidate, e-mail and telephone number)

The application with attachments must be delivered in our electronic recruiting system, please follow the link "apply for this job". Foreign applicants are advised to attach an explanation of their University's grading system. Please note that all documents should be in English (or a Scandinavian language).

Applicants may be called in for an interview.

Formal regulations

Please see the guidelines and regulations for appointments to Research Fellowships at the University of Oslo.

No one can be appointed for more than one PhD Research Fellowship period at the University of Oslo.

According to the Norwegian Freedom of Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results etc.

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 further information regarding the positions, please contact: Professor Ingrid K. Glad glad@math.uio.no

For questions regarding the recruitment system, contact HR Officer Nina Holtan, nina.holtan@mn.uio.no

About the University of Oslo

The University of Oslo is Norway’s oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

Department of Mathematics is part of the Faculty of Mathematics and Natural Sciences. The Department is engaged in research covering a wide spectrum of subjects within mathematics, mechanics and statistics.

Jobbnorge-ID: 184941, Søknadsfrist: 30. april 2020