

NTNU - knowledge for a better world

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 Mathematical Sciences**

PhD-position in Ecological Statistics (IE-086-2018)

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

This position is one of 5 positions within the project Transforming Citizen Science for Biodiversity, see <https://www.jobbnorge.no/ledige-stillinger/stilling/151098>, 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 *Transforming Citizen Science for Biodiversity* to succeed.

Information about the Department

The [Department of Mathematical Sciences](#) has 35 full professors, 20 associate professors and 4 assistant professors. In addition, there are 2 adjunct professors, 5 adjunct associate professors, about 20 postdoctoral fellows and about 60 doctoral students. There are 11 women in tenured positions. The department has five research groups: algebra, analysis, differential equations and numerical analysis, geometry and topology, and statistics.

About the PhD-position in Ecological Statistics, on Quality Control in Citizen Science data

This successful applicant will develop methods for quality control in citizen science data, specifically:

1. Develop models that can flag observations that may be incorrect (e.g. due to mis-identification or deliberate mis-reporting), and suggest correct identifications.
2. Make tools that can present flagged observations back to citizen scientists, so that their reliability can be checked.
3. In collaboration with other members of the project, map areas of low effort and use Value of Information theory to infer where more sampling effort is best focussed.

The PhD fellow will be part of the Department of Mathematical Sciences at NTNU and will have her/his workplace there. [See https://www.ntnu.no/imf](https://www.ntnu.no/imf). The Department currently has around 60 PhD fellows.

Their primary supervisor will be Prof. Bob O'Hara (Dept. of Mathematical Sciences), with collaboration primarily from Artsdatabanken, and Prof. Anders Finstad (Museum of Natural History) and Prof. Jan Ketil Rød (Dept. of Geography).

Qualifications

The applicants should have a MSc-degree in statistics or comparable competence, have experience with programming, good communication skills and interest in working in a cross-disciplinary team. It is an advantage, but it is not required, to have experience with Bayesian statistics, hierarchical modelling, integrated nested Laplace approximations (INLA), and experience with cross-disciplinary research.

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.

In particular, admission to PhD education at NTNU requires an average grade of at least B, within a scale of A-E for passing grades (A best), for the last two years of the master's degree.

The appointment is for a term of 3 years without teaching assistance, or up to 4 years including 25% of teaching assistance.

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 regulations

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 pension 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 and the 'Transforming Citizen Science for Biodiversity' project, please contact Professor Bob O'Hara (bob.ohara@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 October 1, 2018

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

Application deadline is May 27, 2018

Mark the application: IE-086-2018

Jobbnorge ID: 151324, Deadline: The application deadline has passed