Associate Professor in Software Engineering

The Faculty of Information Technology, Mathematics and Electrical Engineering at the Norwegian University of Science and Technology (NTNU) http://www.ntnu.edu/ime invites applications for a full-time associate professorship in Software Engineering affiliated with the Department of Computer and Information Science (http://www.ntnu.edu/idi)

Information about the Department
Currently there are 25 professors and 12 associate professors at the department. In addition there are 10 adjunct associate professors, 8 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. Research activities are organized into six groups; algorithms/HPC/graphics, computer architecture and design, data and information management, information systems, intelligent systems, and software engineering.

The department has a wide range of teaching responsibilities, ranging from fundamental education in information technology for other engineering and natural science students, a Bachelor's program in Informatics, Master's programs in Informatics and Information Systems also for foreign students and a Computer Science program for engineering students, as well as PhD education and continuing education.

Field of research and teaching for the associate professorship
Software engineering, from the perspective of this position announcement, concerns methods and tools for development and maintenance of large and complex software systems, with an empirically oriented and applied perspective, with high relevance for the software development industry and society. With a focus on large and complex systems, important areas include:

- All aspects of software dependability - i.e. availability, reliability, safety and security
- Development of highly dependable systems using agile methods
- Measurement of software project and system characteristics

The associate professor is expected to play a leading role in research and research based education in software engineering in collaboration with the existing staff. Research activities are expected to have a strong international profile and impact. The research in software engineering should have a long-term perspective according to the strategy of the department and contribute to the current group research. Currently the group is doing research on a wide range of areas relative to the development, use and evolution of information and software systems on enterprise, workgroup and personal level. Research is done relative to systems both in private and public sector, including the health sector, supporting work, learning and entertainment. Systems applies technologies for enterprise integration as well as component composition within and across organizations in digital ecosystems including the utilization of mobile and ubiquitous technologies, social media, big data analytics and gaming technologies.

Responsibilities and duties
MSc and PhD candidates from the study programs of the faculty are expected to be competitive in an international job market. The associate professor will play a leading role in developing the educational profile in software engineering and ensuring an excellent learning environment, in collaboration with colleagues, students, and external stakeholders. The faculty's study programs should have a strong international profile, and the associate professor is expected to be able to contribute to the development of international alliances and collaboration. The associate professor is expected to teach relevant courses at all levels and should supervise MSc and PhD students. Continued education is included in the portfolio of educational activities.

The research activities of the department rely crucially on external funding, and the development of educational programs may also receive external funding. The associate professor is expected to work actively to receive research grants and other external funding from the Research Council of Norway, Nordic and European research and educational agencies, relevant industry, and other available sources.

In addition to research and education, an associate professor is expected to be able to disseminate relevant parts of her/his research to wider audience. The associate professor is furthermore expected to participate in the formal management of research, education, and other relevant areas of activity in agreement with the Department Head.

Qualifications
The applicant has to demonstrate professional qualifications within essential areas of software engineering and scientific competence within one or more areas of specialty. She or he should have a good publication record in terms of recent papers in international peer-reviewed journals and recent publications in other relevant, well-known international publication channels. Documented external funding and experience with research leadership will be rated positively. A person employed in the category of associate professor should have research potential which makes it likely to qualify for full professorship within five years of employment, even with normal teaching duties.

The applicant should demonstrate the ability to develop educational activities and the learning environment. She or he should have experience in the supervision of master and doctoral students or similar experience qualifying for such work. The applicant should demonstrate communicative skills that qualify for excellent teaching, supervision, and dissemination, and have good collaboration skills necessary for joint projects with colleagues. Relevant collaboration with industry will also be considered positively.

The candidates must be able to document significant research experience and contributions in the international frontline within the field of the position. Scientific qualifications at least equivalent to a doctoral degree within one or several subareas of the field is required, with emphasis on the areas for which the position has special responsibility. The candidate's personal aptitude and motivation for the position will be assigned great weight in the selection process.

Qualifications for the associate professorship
To be employed as an associate professor the candidate must have a good publication list in international peer-reviewed conferences and journals, and must have demonstrated capability to initiate and lead research. Documented capability to attract external research funding will be seen as positive.
Experience with development of courses and educational activities, and supervision of master and doctoral students will be regarded as positive for applicants to the associate professorship. The applicants should also demonstrate the communication skills required for excellent teaching, supervision and dissemination.
The Software Engineering field has a long-standing and good tradition for collegial collaboration, and the ability for teamwork will be central. Ability to, and interest in, collaboration with neighboring scientific areas is also important
Further details about the associate professorship can be obtained from Professor John Krogstie, phone (+47) 73593677 or e-mail: krogstie@idi.ntnu.no,
or Head of the Department, Letizia Jaccheri. Phone (+47) 73593469, or e-mail: letizia.jaccheri@idi.ntnu.no.
For information about processing of applications, please contact Senior Executive Officer Anne Kristin Bratseth, Phone (+47) 73596715, e-mail: anne.kristin.bratseth@ime.ntnu.no

Application requirements
The application should contain:

- CV including information pertaining to the given qualifications and a full list of publications with bibliographical references
- Testimonials and certificates
- The most important publications that are relevant for the evaluation of the applicant's qualifications (maximum 10 publications) A brief description of the scientific/technological relevance of the candidate's research
- Research proposal for the first five years of employment (maximum 10 pages)
- Information about educational experience, including development of study programs, curricula, teaching experience, and development of teaching methods and the learning environment. (Documentation of an applicant's pedagogical qualifications: http://www.ntnu.edu/vacancies/pedagogical-qualifications)
- Information about dissemination activities
- Other documents which the applicant would find relevant.

Joint works will also be evaluated. If it is difficult to identify the contributions from individuals in a scientific collaboration, applicants are to enclose a short summary of her/his contribution.

NTNU expressively invites applications from qualified female scientists.

The applications will be evaluated by an international expert committee. The applicants that have been short-listed will be invited for interviews and trial lectures. The successful applicant will ideally start in the second half of 2015.

Formal regulations
Weight will be placed on pedagogical skills. The evaluation of the candidate will be based on documented pedagogical material, including pedagogical education/training, the presentation of academic work, and experience from supervising master-level students and doctoral candidates, and teaching as well as other pedagogical matters. The evaluation will consider both the quality and the scope.

Academic staff employed without prior formal pedagogical qualifications in university-level teaching, are required to complete a recognized course that gives a pedagogical qualification within two years of taking up the appointment. The University NTNU offers such courses.

The associate professor should adhere to regulations that concern changes and developments within the discipline and/or the organizational changes concerning activities at NTNU.

New members of the academic staff who do not already master a Scandinavian language are expected to achieve proficiency in Norwegian or another Scandinavian language within three years. This proficiency should correspond to level three in the "Norwegian for foreigners" courses provided at the Department of Applied Linguistics at NTNU.
The appointment is to be made in accordance with the regulations for state employees and civil servants in Norway.

The position as **associate professor** follows code 1011, and is remunerated according to the wage levels 57-77 on the Norwegian government state salary scale, with gross salary from NOK 482 500 to NOK 710 100 a year.

2% of the salary will be deducted as an obligatory premium to the Norwegian Public Service Pension
Applications are to be submitted electronically through this website. Preferably, all attachments should be combined into a single file.

Reference number: IME 049-2014
Application deadline: 2015-01-11

Tilleggsinformasjon

Arbeidssted: