

Well-funded tenure track Assistant Professor position within AI/ML open at Uppsala University, Uppsala, Sweden.

Description

Uppsala University is a comprehensive research-intensive university with a strong international standing. Our mission is to pursue top-quality research and education and to interact constructively with society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden's most exciting workplaces. Uppsala University has 44.000 students, 7.100 employees and a turnover of SEK 7 billion.

The Department of Information Technology has a leading position in research and all levels of higher education. Today the department has 280 employees, including 120 academic staff and 110 full-time PhD students. More than 4000 students take one or several courses offered by the Department each year and around 30 research groups conduct their activities within it. For more information: <http://www.it.uu.se>.

This is a well-funded position, which comes with funding for one PhD student, four post-doc years and a generous budget for travels, etc.

Description of Subject Area: Artificial intelligence and machine learning deals with automated methods of data analysis, i.e., methods that can automatically find models/patterns of data and then use these models to predict future data or perform other types of decision making under uncertainty. The methods typically employ a model that is built automatically from data to compute predictions or make decisions, rather than just follow explicitly programmed instructions. AI and machine learning, generally considered to be topics in computer science, are closely related to probability theory and statistics and for this position the links to mathematics is especially important.

Artificial intelligence and machine learning are major areas of research comprising several subareas. Examples of such subareas include, but are not limited to: large-scale optimization, stochastic optimization, probabilistic programming, approximate inference, Monte Carlo methods, Bayesian nonparametric modeling, maximum likelihood estimation, Gaussian processes, graph learning, deep learning, reinforcement learning, inverse modeling, parameter estimation, big data (processing of large data sets), pattern recognition, and uncertainty quantification.

The topic for this position is large-scale stochastic optimization, with a focus on algorithm development and analysis. Relationships between large-scale optimization and probabilistic modelling is also an important topic. The non-convex stochastic optimizers are a key enabler of deep learning and many other contemporary machine learning methods.

Duties: The position includes teaching, research and administration, but it is a research-intensive position (80% research). Teaching duties include course responsibility, course administration and supervision of second- and third-cycle students. The holder shall also keep abreast of developments within the subject area and the developments in wider community that are significant for the work at the university. A position as Assistant Professor is intended to qualify the holder for a teaching position with higher qualification requirements.

Appointment Period: The position can be held for a maximum of six years. An Assistant Professor can apply for promotion to Associate Professor. If the Assistant Professor is deemed suitable and fulfills the criteria for promotion established by the Faculty Board he/she shall be promoted to and employed as Associate Professor.

Qualifications Required: According to the Swedish Higher Education Ordinance those qualified for appointment as Assistant Professor are persons who have obtained a doctoral degree or achieved the equivalent competence. It is necessary that the pedagogical skills and the research expertise are relevant to the content of the employment and the tasks that will be included in the employment. Applicants who have obtained a doctoral degree or achieved the equivalent competence in five years or less prior to the end of the application period will be given priority.

According to Uppsala University's appointments regulations, teaching expertise is an eligibility requirement for appointment as an Assistant Professor. To obtain teaching expertise, the applicant should have participated in teacher training for higher education of relevance to operations at the University, comprising at least five weeks, or be considered to have acquired the equivalent competence. If it has not been possible to acquire this qualification prior to employment, qualifying training for teachers in higher education shall be completed during the first two years of employment.

A general eligibility requirement is that the applicant must possess the personal capabilities necessary to carry out fully the duties of the appointment.

Documented ability to teach in Swedish and/or English is a requirement unless special reasons prevail. The holder is expected to be able to teach in Swedish within two years.

Assessment Criteria/Ranking

Research Expertise and Teaching Expertise: The ranking of eligible applicants will be based primarily on research and teaching expertise, of which weight will be primarily given to research expertise. Research expertise comprises research merits as well as the applicant's potential to contribute to the future development of both research and teaching. In assessing research expertise special weight will be attached to research merits in Artificial Intelligence/Machine Learning and Optimization. Proven publication record in the leading Machine Learning venues is valuable.

As much attention shall be given to the assessment of teaching expertise as to the assessment of research expertise. Teaching expertise comprises educational and teaching qualifications. In assessing teaching expertise teaching quality must be the prime consideration. The scope of teaching experience, in terms of both breadth and depth, must also be afforded consideration.

Collaboration Expertise: Collaboration expertise is important and will be afforded consideration.

Other Expertise: The ability and desire to develop new undergraduate and graduate courses is important for the employment.

All merits must be documented in a manner that makes it possible to assess both quality and scope.

In filling this position the University aims to appoint the applicant who, following a qualitative holistic assessment of her/his competence and expertise, is judged to have the best potential to carry out and develop the relevant duties and to help advance operations.

In an overall assessment of the applicant's qualifications, parental leave, part-time work relating to care of children, union assignments, military service, or the like are to be regarded as work experience.

Uppsala University strives to be an inclusive workplace that promotes equal opportunities and attracts qualified candidates who can contribute to the University's excellence and diversity. We welcome

applications from all sections of the community and from people of all backgrounds. At present there are more employees with legal gender man than legal gender woman among Assistant Professors within the Faculty. The university is striving for a more balanced gender distribution within this category.

Salary: Individually negotiated salary.

Starting date: As soon as possible or as otherwise agreed

Type of position: Temporary full-time position six years.

For further information about the position please contact

Professor Thomas Schön, e-mail thomas.schon@it.uu.se

For further information please see:

[Uppsala University appointment regulations](#)

[Faculty appointment regulations](#)

[Faculty appointment regulations for promotion from Associate Senior Lecturer to Senior Lecturer \(chapter 10.1, and appendix 3\)](#)

Please submit your application by March 11 2020 at the latest, UFV-PA 2019/4274.

In the event of any disagreement between the English and the Swedish versions of this announcement, the Swedish version takes precedence.

If you are an international candidate, you will find a lot of information about working and living in Sweden at www.uu.se/joinus.

Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.

Placement: Department of Information Technology

Type of employment: Full time , Temporary position longer than 6 months

Pay: Fixed salary

Number of positions: 1

Working hours: 100%

Town: Uppsala

County: Uppsala län

Country: Sweden

Union representative: Seko Universitetsklubben seko@uadm.uu.se

ST/TCO tco@fackorg.uu.se

Saco-rådet sacco@uadm.uu.se

Number of reference: UFV-PA 2019/4274

Last application date: 2020-03-11

Link: <https://www.uu.se/en/about-uu/join-us/details/?positionId=306450>