

Assistant professor (tenure track) or associate professor in Empirical Software Engineering at Aarhus University

Aarhus University, Denmark - an international top-100 university - has made an ambitious strategic investment in a recruitment plan to radically expand [the Department of Electrical and Computer Engineering](#). Therefore, the department invites applications from candidates that are driven by excellence in research and teaching as well as external collaboration on societal challenges.

The position will be in the Software Engineering and Computing Systems section. The section performs teaching and conducts innovation & research in the systematic development of software taking its context into account. This ranges all the way from desktop computers over mobile devices to fully-fledged system of systems and cyber-physical systems. The section is particular well-known internationally for its research around digital twins, using co-simulation for cyber-physical systems also including autonomy.

Expected start date and duration of employment

The position is open from March 1st, 2024.

Job description

You will be contributing to our ongoing innovation, research and teaching activities based on your qualifications.

Most of our activities are done in collaboration with other researchers within the section and department – and in most cases in an interdisciplinary research context.

Your profile

Applicants should hold a PhD in a relevant research area (see below). The job can be either an assistant professor (tenure track) or an associate professor. If you apply for an associate professorship, successful external funding is necessary, several papers in high-quality journals or other high-quality publication channels as well as documented excellence in teaching. Read the detailed criteria [here](#).

The general focus is **Empirical software engineering**: Research from the perspective of software quality, human factors and empirical studies on the way we build software, with a specific focus on embedded software/Cyber-physical systems and the latest technologies.

Software quality: Software needs to be of high quality. Quality can mean many things, including definitions, measurements of quality as well as quality assurance techniques.

Human aspects: Humans play a central role in achieving software of high quality that solves a real problem. Humans need to be the centre of software engineering processes – be it the engineers themselves, users or other stakeholders. We need to understand all of them, and explicitly consider them in the way we develop, deploy and maintain systems.

Empirical studies: All techniques, methods and tools need to reliably show their positive impact on the goal of high-quality software. Thus, it is required to run empirical studies, such as case studies, experiments or surveys, to objectively evaluate these impacts.

Software Technologies: Systems are getting more and more complex using many different frameworks and processes. We focus on ways AI can support the product, modern development methods (e.g. DevOps, microservices), domain specific languages and software frameworks.

About the Department of Electrical and Computer Engineering, Aarhus University

The Department of Electrical and Computer Engineering is one of four engineering departments at the Faculty of Technical Sciences at Aarhus University.

Our vision is to be a world-leading department for research, education and innovation in electrical and computer engineering, creating a positive and visible impact on society and the environment through interdisciplinary collaboration, excellence and diversity.

Application Deadline:
21 June 2023

Faculty:
Faculty of Technical
Sciences

Institute/Faculty:
Department of
Electrical and
Computer Engineering

**Academic contact
person:**
Jens Bennedsen
Ingeniørdocent
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+4541893090

Vacant positions:
2

Hours per week:
37

**Expected date of
accession:**
01/03/2024

Many of our research and development activities are based on the specific innovation needs or specialist application areas of specific companies. We collaborate closely with the public sector and private companies to ensure that the knowledge and technology generated in the department's research environments has a clear anchoring in reality and benefits society as a whole.

Ensuring gender balance at the Department of Electrical and Computer Engineering is a high priority at Aarhus University, and we particularly encourage women to apply for this position. No candidate will be given preferential treatment, and all applicants will be assessed on the basis of their qualifications for the position in question.

For more information about the Department of Electrical and Computer Engineering, please visit <https://ece.au.dk/> or visit our [Job and Career webpage](#).

See more about our activities on LinkedIn: <https://www.linkedin.com/company/au-ece/>

You can read more about the [Software Engineering and Computing System's section](#).

Research areas at the department

Electrical and computer engineering are closely related technical science disciplines focusing on research into hardware and software technologies. We focus on research and development activities in the fields of communication and networks, control and automation, photonics, signal processing, software and IT systems, robot technology, medical technology, health technology, electrical energy technology, and acoustics and sound technology.

The department wish to build a research and study environment with equality and diversity as a core value for recruitment as well as for daily study and work life.

The benefits of working in Denmark

Denmark as a country offers the opportunity to pursue a career without compromising your family life and in general work-life balance in Denmark are among the best in Europe. In addition, Denmark is a safe place to live with a very low crime rate and is in general secure and equal. The Danish society builds on a welfare system which means your taxes goes into welfare services such as free healthcare and education. Taxes in Denmark are high but international academic staff members can, under certain conditions, benefit from a special tax scheme to further improve working conditions. On top of this collective agreements guarantee you a safe workplace, fair wages, pay during sickness, paid paternity/-maternity leave, flexible workhours and much more.

If you want to know more about the Danish way of life please visit: [Life in Denmark](#). You can also contact our [International Staff Office](#).

Place of work and area of employment

The place of work is the Department of Electrical and Computer Engineering, Finlandsgade 22, DK-8200 Aarhus N, Denmark and the area of employment is Aarhus University with related departments.

Contact information

For further information, please contact: Head of Section Professor Jens Bennedsen, jbb@ece.au.dk, +4541893090 or Professor Peter Gorm Larsen, pgl@ece.au.dk, +4541893260

Deadline

Applications must be received no later than June 21, 2023.

Technical Sciences Tenure Track

Aarhus University offers talented scientists from around the world attractive career perspectives via the Technical Sciences Tenure Track Programme. Highly qualified candidates are appointed as Assistant Professors for a period of six years with the prospect of performance- based advancement to a tenured Associate Professorship.

The aim of the Technical Sciences Tenure Track Programme is to:

- attract outstanding talented individuals that are competitive at an international level
- to promote the early development of independent research success early in the career of scientists

- to create transparency in the academic career path

As part of the tenure track position, the candidate is offered:

- access to research infrastructure
- capability development, including postgraduate teacher training
- a mentoring programme
- support to develop scientific networks and to secure interdisciplinary research at the highest level

As part of the Aarhus University Tenure Track Programme, the University carries out a mid-way evaluation to review the progress of the tenure track candidate after three years, according to the same criteria used in the final tenure review. The final tenure review is conducted after five and a half years. If the review is positive, the candidate will be offered a tenured position as Associate Professor at Aarhus University.

Please refer to the [tenure track guidelines](#) for the tenure review criteria and for the tenure review process.

Application procedure

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the assessment committee if necessary, – the head of department selects the candidates to be evaluated. The selection is made on the basis of an assessment of who of the candidates are most relevant considering the requirements of the advertisement. All applicants will be notified within 6 weeks whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee and will receive his/her assessment. Once the recruitment process is completed a final letter of rejection is sent to the deselected applicants.

Letter of reference

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline.

Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

Formalities and salary range

Technical Sciences refers to the [Ministerial Order on the Appointment of Academic Staff at Danish Universities under the Danish Ministry of Science, Technology and Innovation](#).

The application must be in English and include a curriculum vitae, degree certificate, a complete list of publications, a statement of future research plans and information about research activities, teaching portfolio and verified information on previous teaching experience (if any). Guidelines for applicants can be found [here](#).

Appointment shall be in accordance with the collective labour agreement between the Danish Ministry of Taxation and the Danish Confederation of Professional Associations. Further information on qualification requirements and job content may be found in the [Memorandum on Job Structure for Academic Staff at Danish Universities](#).

Salary depends on seniority as agreed between the Danish Ministry of Taxation and the Confederation of Professional Associations.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

Aarhus University offers a broad variety of services for international researchers and

accompanying families, including relocation service and career counselling to expat partners. Read more [here](#). Please find more information about entering and working in Denmark [here](#).

The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/