Assistant professor, Tenure track Assistant professor or Associate professor in Cyber Security, Department of Electrical and Computer Engineering, Aarhus University

Application Deadline:
20 January 2025

Faculty:
Faculty of Technical Sciences

Institute/Faculty:
Department of Electrical and Computer Engineering

Academic contact person:
Jens Bennedsen
Ingeniørdocent
jbb@ece.au.dk
+4541893090

Vacant positions:
1-3

Hours per week:
37

Expected date of accession:
01/05/2025

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 who are driven by excellence in research and teaching as well as external collaboration on societal challenges.

The position as assistant professor, tenure track assistant professor or associate professor 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 particularly well-known internationally for its research around digital twins, using co-simulation for cyber-physical systems also including autonomy. We want to add to our competencies a special focus on cyber security.

The position is open from May 1st, 2025.

Job description

You will contribute to our ongoing research, teach at both undergraduate (BSc and BEng) and graduate level courses, and engage in innovation activities based on your qualifications.
We are currently developing a new specialisation in cyber security within our master's programme. You will be involved in designing the courses for this specialisation and teach one or more of them.

Most of our research is externally funded, and therefore we expect you to collaborate with fellow academics and industry in defining research projects and developing proposals.
You will actively contribute to the academic environment in the department by supervising and mentoring students at undergraduate, graduate and postgraduate levels.
Our activities are predominantly carried out in collaboration with other researchers within the section and department and often in an interdisciplinary research context.
Recently, we have welcomed a full professor in cyber security, who is leading the cyber security research group, which you will become a part of.

Your qualifications

Applicants should hold a PhD in a relevant research area (see below). The job can be either an assistant professor, tenure track assistant professor or 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.
Detailed criteria can be found here.

The successful candidate will have a holistic approach to system security, which builds on a strong technical background in cybersecurity.

Areas of interest include, but are not limited to:

- Identity and Access Management, incl. policies, protocols and mechanisms for (biometric) authentication and access control
- Network Security Architectures and Protocols
- Network Security Technologies, incl. Firewalls, IDS, NDR, EDR, Honeypots, etc.)
- Computer and Network Forensics
- Reverse Engineering and Malware Analysis
- AI in security and security in AI
- Privacy Enhancing Technologies
- Offensive security techniques and pen testing

- (Empirical) studies: All techniques, methods and tools need to reliably show their positive impact on the goal of secure systems
- Governance, Risk and Compliance (GRC)

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.

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 have a clear anchoring in reality and benefit 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 based on their qualifications for the position in question.

For more information about the Department of Electrical and Computer Engineering, please visit https://ece.au.dk/

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 at https://ece.au.dk/en/research/key-areas-in-research-and-development/software-engineering-computing-systems

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 wishes to build a research and study environment with equity and diversity as core values 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 work hours 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, Aarhus University, 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 Christian Damsgaard Jensen, cdj@ece.au.dk, +4522187929

Deadline

Applications must be received no later than 20th January 2025.

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.

Ensuring gender balance at the Department of Electrical and Computer Engineering is a high priority at Aarhus University, and therefore, 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.

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.