

Postdoctoral

Ecole/Institution/Société:

University of Southern Denmark, Denmark / Odense

Discipline:

Electronics

Type d'emploi::

Full-time

Date de publication:

2025-02-23

Personne à contacter:

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Post-Doctoral Researcher in Electronics with Experience in Electromagnetic Coupling

Job Description

The section of Digital and High-Frequency Electronics at the Institute of Mechanical and Electrical Engineering at the Faculty of Engineering of the University of Southern Denmark (SDU) is opening a new position at the level of Post-Doctoral Researcher.

The application deadline is March 31, 2025, at 11.59 PM/23.59 (CET/CEST)

The section focuses on conducting research in digital and high-frequency electronics, embedded systems, control, and communication, utilizing cutting-edge reconfigurable computing and sensors. The aim is to develop next-generation electronics and computing solutions that solve technology-related challenges in fields such as autonomous robots, drones, IoT, smart grid, and healthcare.

The section is a vital component of our educational programs in electrical engineering in Odense, offering Bachelor's and Master of Science degrees in Electronics Engineering. Currently, the section focuses on two research fields: 1) Drones for Infrastructure Inspections and Interactions (<https://www.sdu.dk/da/diii>) and 2) Chip design and Neuromorphic computing. Over the next few years, the section is expected to expand to include at least 20 academics, including PhD students and engineers, to support research, industrial collaboration, and educational activities.

The SDU campus in Odense comprises five faculties and soon also a large university hospital

creating a great concentration of academics and students facilitating interdisciplinary research and rich student life. The city of Odense is culturally rich, surrounded by a vibrant and growing robotics community, and highly livable with a green banked meandering river cutting through the center and attractive residential areas.

Job description

The position seeks an expert researcher to develop next-generation robotic systems capable of operating on high-voltage lines. Responsibilities include designing and testing EMI shielding for active powerline maintenance applications. The robotic system and its protection will be validated under different voltage levels (up to 400kV) and weather conditions.

Duties

As a post-doctoral researcher, your role will encompass research and teaching. Your teaching responsibilities will involve course planning and teaching and supervision of BSc and master students in related fields. Additionally, you will be expected to support the research team in securing external funding.

Qualifications required

The applicant must hold a PhD or be nearing completion of a PhD in electronics, mechatronics, robotics, or related fields.

The applicant must possess relevant research expertise aligned with the position's content and responsibilities.

Knowledge of EMI shielding, energy harvesting, and robot electronics system design is required.

For further information about the position, please contact the Head of Digital and High-frequency Electronics Section, Professor Emad Samuel Malki Ebeid, e-mail: esme@sdu.dk .

If you experience technical problems, please contact hcm-support@sdu.dk .

Conditions of employment

Appointment as postdoctoral researcher is temporary and for an initial 20-month period. Extension

may be possible depending on available funding.

The preferred starting date is from June 15, 2025.

Employment as a postdoc requires scientific qualifications at PhD level at the time of employment.

The person employed in the position may, based on a specific individual managerial assessment, be exempted from time registration, also known as a self-organiser.

The successful applicant will be employed in accordance with the agreement between the Ministry of Finance and the Danish Confederation of Professional Associations. Further information on salary and taxation.

Assessment and selection process

[Read about the Assessment and selection process](#) .

Applications will be assessed by an assessment committee. Shortlisting may be applied. Only shortlisted candidates will receive a written assessment. [Read about shortlisting at SDU](#).

Interviews and tests may be part of the process.

Application procedure

Applicants are advised to read the [SDU information on how to apply](#) and specific faculty information for application at the Faculty of Engineering.

Assessment of candidates is based on the application material. You must include the following documents in English:

A motivation letter that clearly explains the applicant's interest, qualifications, and motivation for the

position (max. 2 pages).

Detailed Curriculum Vitae, including personal contact information, describing the research, along with any other relevant information.

Verified copies of official Certificates/Diplomas (BSc, MSc, and Ph.D.).

List of publications with the most relevant publications highlighted.

Up to three names and emails of researchers, who can provide an informed reference letter at short notice. (Reference letters and other relevant qualifications may also be included.)

UPLOAD GUIDE: Motivated application shall be uploaded as 'Cover letter', Curriculum Vitae shall be uploaded as 'Resume'. All other documents shall be uploaded as 'Miscellaneous documents'.

Documents must not contain a CPR number (civil registration number) - in this case, the CPR number must be crossed out.

The application and CV must not exceed 10 MB.

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The University of Southern Denmark wishes to reflect the surrounding community and therefore encourages everyone, regardless of personal background, to apply for the position. SDU conducts research in critical technologies, which, due to the risk of unwanted knowledge transfer, are subject to a number of security measures. Therefore, based on information from open sources, background checks may be conducted on candidates for the position.

Further information for international applicants about entering and working in Denmark. You may also visit [WorkinDenmark](#) for additional information.

Further information about The Faculty of Engineering.

About Us

The University of Southern Denmark was established to create value for and with society. Whether our contributions come in the form of excellent research, innovative solutions, education or learning, we must make a positive difference to society and contribute to a sustainable future. We do this by cultivating talents and creating the best environments for research and learning. It is therefore crucial that SDU retains, develops and recruits talent. At the same time, we need to ensure consistently high quality in all our activities - and we can only do that with the right people. The University's researchers, lecturers, students, managers and technical/administrative staff are the foundation of our success.

Read about SDU

Job Info

Job Identification 2549

Job Category VIP

Posting Date 02/20/2025, 04:02 AM

Locations Campusvej 55, Odense M, 5230, DK

Apply Before 03/31/2025, 05:59 PM

Job Schedule Full time

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