



to: Uwe Bellh

Saarland University is a campus university with an international reputation for research excellence, particularly in computer science and in the life sciences and nanosciences. The university is also distinguished by its close ties to France and its strong European focus. Around 17,000 students, studying over one hundred different academic disciplines, are currently enrolled at Saarland University. Saarland University is officially recognized as one of Germany's family-friendly higher-education institutions and with a combined workforce of more than 4000 it is one of the largest employers in the region.

The Systems Neuroscience & Neurotechnology Unit, medical faculty is inviting applications for the following position commencing at the earliest opportunity.

Academic research assistant (m/f/x)

Reference number W2689, salary in accordance with the German TV-L salary scale¹, pay grade: E13 TV- L, duration of employment: 30.04.2027, volume of employment: 100 % of standard working time.

Workplace/Department:

Scientific collaboration in the VI-Screen PRO project at the Systems Neuroscience and Neurotechnology Unit, Medical Faculty of Saarland University:

You will work in an interdisciplinary team and in cooperation with scientists from the TU-Berlin and the Saarland University Hospital (UKS) on the further development of a platform for contactless screening of respiratory viruses. In the project, we are using a multimodal sensor system (stereo RGB, NIR, thermal imaging) and carrying out data acquisition at the UKS. The laboratory diagnostic detection of multiple different respiratory viruses and bacterial pathogens will be available as ground truth for each video. You will work with a state-of-the-art data set that is currently unique worldwide and have the opportunity to publish scientific papers.

The work area includes the following tasks in particular:

- Implementation of data acquisition / data management

Improvement of computer vision algorithms for the multimodal camera system in cooperation with TUB partners
Scientific evaluations in relation to laboratory-diagnostic ground truth

The focus is on recording and analyzing the data, while the other tasks are solved in cooperation and exchange with the project team

¹ TV-L = collective agreement on remuneration of public sector employees in the German Länder

The pay grade assigned to an employee depends on their professional qualifications and the number of years of service. Each pay grade is further subdivided into levels. Entry-level employees with no previous experience will initially be assigned a level 1 rating. After one year at level 1 of the E10 pay grade, an employee will move up to level 2. After a further two years, the employee will move to level 3, etc.



Job requirements and responsibilities:

- Data acquisition and data organization in database structures
- (Further) development and programming of machine learning and computer vision methods in the field of noncontact physiology and psychophysiology
- Mapping of laboratory diagnostic ground truth to the contactless data collected
- Collaboration on the implementation of these methods in a real-time system
- Literature research and preparation of scientific publications

Your academic qualifications:

• Completed scientific university studies in visual computing, computer science, math or comparable (M.Sc.) or scientific doctoral degree / PhD

The successful candidate will also be expected to:

- Have experience in the area of visual computing, deep learning or biomedical imaging, backed up with successful projects and publications
- Have very good programming skills in Python or Matlab, basic programming skills in C++
- Be interested in interdisciplinary work and has an interest in working on topics that are not their core area of expertise to look at the given problems from different angles
- Be able to work independently on scientific topics and to coordinate requirements in an interdisciplinary team
- Have an interest to compile their results into scientific publications
- Have scientific writing skills in English
- Language skills: Basic German skills

What we can offer you:

- A flexible work schedule allowing you to balance work and family, among other things the possibility of teleworking
- Secure and future-oriented employment with attractive conditions
- A broad range of further education and professional development programmes (for example language courses)
- An occupational health management model with numerous attractive options, such as our university sports programme
- Supplementary pension scheme (RZVK)
- Discounted tickets on local public transport services ('Job-Ticket' of the saarVV)

We look forward to receiving your **meaningful online application** (in a PDF file) by **31.07.2025** to **elena.schneider@uni-saarland.de**. Please include the reference number **W2689** in the subject line of the e-mail.

If you have any **questions**, please contact us for assistance. Your contact: Frau Elena Schneider Systems Neuroscience & Neurotechnology Unit Tel.: +49 681 5867 797 Email: elena.schneider@uni-saarland.de

Pay grade classification is based on the particular details of the position held and the extent to which the applicant meets the requirements of the pay grade within the TV-L salary scale. Part-time employment is generally possible.

If you have obtained a foreign university degree, a proof of the equivalence of this degree with a German degree by the Zentralstelle für ausländisches Bildungswesen (ZAB) is needed before hiring. If necessary, please apply for this in time. You can find more information at <u>https://www.kmk.org/zeugnisbewertung</u>.

Unfortunately, neither costs for attending an interview at Saarland University nor costs for any certificate evaluation by the ZAB can be reimbursed in principle.

We welcome applications regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity. In accordance with its policy of increasing the proportion of women, the University actively encourages



applications from women. Applications from severely disabled persons will be given preferential consideration in the event of equal suitability.

When you submit a job application to Saarland University you will be transmitting personal data. <u>Please refer to our privacy notice</u> for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung. By submitting your application you confirm that you have taken note of the information in the Saarland University privacy notice.