

The University of Klagenfurt, Austria, with approximately 1,500 employees and over 12,000 students, is located in the Alps-Adriatic region and consistently achieves excellent placements in rankings. The motto “per aspera ad astra” underscores our firm commitment to the pursuit of excellence in all activities in research, teaching, and university management. The principles of equality, diversity, health, sustainability, and compatibility of work and family life serve as the foundation for our work at the university.

The University of Klagenfurt is pleased to announce the following open position at the **Department of Networked and Embedded Systems**, Mobile Systems Group, at the Faculty of Technical Sciences, with a negotiable starting date, commencing on **September 1, 2023**, at the latest:

Predoc Scientist (all genders welcome) **(in German: Universitätsassistent:in)**

Level of employment: 100 % (40 hours/week)

Minimum salary: € 45,882.20 per annum (gross); classification according to collective agreement: B1

Contract duration: 3 years

Application deadline: July 19, 2023

Reference code: 408/22

Tasks and responsibilities:

- Perform research in the field of **wireless communications and networking** (e.g., 5G/6G, UWB) with emphasis on wireless connectivity for mobile embedded systems like swarm robots, drones, and sensors
- Perform independent scientific work with the aim to submit a dissertation and acquire a doctoral degree in technical sciences
- Teach exercise and lab courses
 - “Mobile Communications” and “Wireless Networks” in the Master’s programme “Information and Communications Engineering” or

- “Physics for Engineers: Electricity and Magnetism” in the Bachelor’s programme “Robotics and Artificial Intelligence”
- Participation in research projects of the group
- Participation in administrative and organizational tasks of the department (e.g., Website, research database, organization of workshops)
- Mentor and co-advise students
- Assistance in public relations activities of the department and the faculty

Prerequisites for the appointment:

- Completed Diploma or Master’s degree from a recognized university in the field of electrical and computer engineering, information and communications engineering, technical informatics, or closely related field. The completion of this degree must be fulfilled no later than two weeks before the starting date; hence, the last possible deadline for meeting this requirement is August 17, 2023.
- Fundamental knowledge in three or more of the following subjects: wireless networks, communication protocols, wireless communications, information and communication theory, robot and drone systems, multi-agent systems
- Proven programming skills in two or more among C/C++, Python, MATLAB, R, or Java
- Fluent in written and spoken English
- Very good scientific communication and dissemination skills (scientific writing and oral presentations)

Additional desired qualifications:

- Knowledge of German
- Good social competences and ability to work in a team
- First scientific publications
- Relevant experience abroad

Our offer:

This position serves the purposes of the vocational and scientific education of graduates of Master’s or Diploma degree programmes and sets the goal of completing a Doctoral degree / a Ph.D. in Technical Sciences. Applications by persons who have already completed a subject-specific Doctoral degree or a subject-relevant Ph.D. programme therefore cannot be considered.

The employment contract is concluded for the position as Predoc Scientist and stipulates a starting salary of € 3,277.30 gross per month (14 times a year; previous experience deemed relevant to the job can be recognised in accordance with the [collective agreement](#)).

The **Mobile Systems Group** lead by Professor Bettstetter focuses on the design, modeling, and analysis of novel techniques for wireless connectivity, networking, and networked control with applications in telecommunication, mobile robotics and drone systems, and industrial networks. The group is part of the Department of Networked and Embedded Systems, which is a leading partner of the university's key research strength "Networked and Autonomous Systems". The group is also part of the interdisciplinary research cluster "Self-Organizing Systems". The team is international with English as the working language and is dedicated to high quality in research and teaching. Expertise includes stochastic modeling and analysis, distributed algorithms and protocols, network simulation and performance analysis, protocol engineering, prototyping on programmable hardware, and wireless measurements. The project portfolio ranges from fundamental concepts and theories to experimental work with industry partners. Current projects are on the following topics: drones in cellular 5G/6G networks, ultra-reliable sensor networks with UWB communication and localization, interference dynamics in wireless networks, and self-organized synchronization and swarming. The group has received several *Best Paper Awards* over the past few years. Teaching activities include lectures, courses, labs, and seminars for the established Bachelor's programme "Informationstechnik" (in German) and the recently launched Bachelor's programme "Robotics and Artificial Intelligence" (in English) as well as for the Master's programme and Doctoral programmes in "Information and Communications Engineering" (in English). The engagement in teaching was recently awarded with the *Excellence in Teaching Award* of the university. The offices and laboratories are in the modern and well-equipped [Lakeside Science & Technology Park](#).

The University of Klagenfurt is a young and vibrant campus university hosting 12,000 students. It is located in the southern part of Austria, a region with outstanding quality of life at the intersection of Alpine and Mediterranean culture.

The University of Klagenfurt also offers:

- Personal and professional advanced training courses, management and career coaching
- Numerous attractive additional benefits, see also <https://jobs.aau.at/en/the-university-as-employer/>
- Diversity- and family-friendly university culture
- The opportunity to live and work in the attractive Alps-Adriatic region with a wide range of leisure activities in the spheres of culture, nature and sports

The application:

If you are interested in this position, please apply in English providing the following documents:

- Letter of application
- Curriculum vitae (with clear information about the degrees including date/place/grade, the experience acquired, the thesis title, the list of publications if any, and any other relevant information)
- Copy of the degree certificates and transcripts of the courses
- Any certificates that can prove the fulfilment of the required and additional qualifications listed above (e.g., the submission of the final thesis/dissertation if required by the degree programme, copy of publications, programming skills certificates, language skills certificates etc.)
- Final thesis or other study-related written work (like seminar reports) or excerpts thereof
- If an applicant has not received the Diploma or Master's degree by the application deadline, the applicant should provide a declaration, written either by a supervisor or by the candidate themselves, on the feasibility of finishing the Diploma or Master's degree by **August 17, 2023 at the latest**.

To apply, please select the position with the **reference code 408/22** in the category "Scientific Staff" using the link "Apply for this position" in the job portal at jobs.aau.at/en/.

For further information on this specific vacancy, please contact Professor Christian Bettstetter (see [nes.aau.at](https://www.aau.at)). General information about the university as an employer can be found at <https://jobs.aau.at/en/the-university-as-employer/>. At the University of Klagenfurt, recruitment and staff matters are accompanied not only by the authority responsible for the recruitment procedure but also by the [Equal Opportunities Working Group](#) and, if necessary, by the [Representative for Disabled Persons](#).

The University of Klagenfurt aims to increase the proportion of women and therefore specifically invites qualified women to apply for the position. Where the qualification is equivalent, women will be given preferential consideration.

People with disabilities or chronic diseases, who fulfil the requirements, are particularly encouraged to apply.

Travel and accommodation costs incurred during the application process will not be refunded.

Translations into other languages shall serve informational purposes only. Solely the version advertised in the University Bulletin ([Mitteilungsblatt](#)) shall be legally binding.