

The University of Klagenfurt, 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**, Embedded Communication Systems Group of the Faculty of Technical Sciences, employment to commence **as soon as possible**:

### **PreDoc Scientist (all genders welcome) (in German: Universitätsassistent\*in) in Embedded Communication Systems**

**Level of employment:** 75 % (30 hours/week)

**Minimum salary:** € 31,200.40 per annum (gross); classification according to collective agreement: B1

**Limited to:** 4 years

**Application deadline:** October 27, 2021

**Reference code:** 553/21

#### **Tasks and Responsibilities:**

- Research in communications and embedded systems with a focus in one of the following domains: machine learning for communications, power line communications, wireless communications, localization systems, signal and data processing, circuits and systems for smart technologies
- Independent research with the aim to submit a dissertation and acquire the PhD
- Teaching in the field of electrical and computer engineering
- Participation in administrative and organizational tasks of the department
- Student mentoring
- Assistance in public relations activities of department and faculty

#### **Prerequisites for the appointment:**

- A university degree (Master or Diplom-Ingenieur) at a domestic or foreign higher education institution in the field of electrical engineering, information and communications engineering, computer engineering, or informatics, graded no lower than “good”. The degree must be completed not later than October 27, 2021.
- Fluent in written and spoken English
- Experience in three or more of the following fields: communications theory, signal and data processing, machine learning, wireless communications, power line communications, UAV systems, smart grid, electronic measurements and instrumentation, circuits and systems
- A solid foundation in both engineering mathematics and statistics
- Programming skills, three or more among: C/C++, Python, MATLAB, LabVIEW, GNU radio, VHDL, CST, HFSS, Spice.

Candidates must provide proof that they meet all the requirements above for the appointment by **October 27, 2021** at the latest.

- An additional requirement (verified during the interview) is the ability to present with clarity and rigor a technical subject.

#### Additional desired qualifications:

- Knowledge of German
- Good social, team work and communication competences
- First research contributions (in the thesis, with participation in research projects and/or publications)
- Relevant international experience

#### 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 € 2,228.60 gross per month (14 times a year; previous experience deemed relevant to the job can be recognised).

The **Embedded Communication Systems Group**, led by Professor Andrea Tonello, is part of the department of Networked and Embedded Systems at the University of Klagenfurt. It works on the design, modeling and analysis of wireless and power line communication (PLC) technologies, signal and data processing, measurements and characterization of telecommunication systems, electronics for communications and for smart/embedded systems. The group addresses interdisciplinary research questions in several application domains: 5G networks, smart grids, IoT, electro mobility, and aerial robotics. Current projects include research on PHY and MAC algorithms exploring machine learning, massive MIMO, radio localization techniques, power grids communications and diagnostics, UAV dynamics, control and navigation, signal and data processing inspired by artificial intelligence and machine learning approaches.

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. Our team is very international and dedicated to quality research and teaching. The offices and laboratories are located in the well-equipped [Lakeside Science & Technology Park](#). The working language is English. The department cooperates with national and international partners in research and industry.

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:

- One-page letter of motivation

- 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.).

To apply, please select the position with the reference code **553/21** in the category “Scientific Staff” using the link “Apply for this position” in the job portal at [jobs.aau.at/en/](https://jobs.aau.at/en/).

Candidates must furnish proof that they meet the required qualifications by **October 27, 2021** at the latest.

For further information on this specific vacancy, please contact Professor Andrea Tonello ([andrea.tonello@aau.at](mailto:andrea.tonello@aau.at) - <http://nes.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.

Short-listed candidates will be invited to an interview (eventually conducted remotely because of travel restrictions due to the pandemic).

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.