

The University of Klagenfurt is pleased to announce the following open position:

PreDoc Scientist [all genders welcome] (in German: Universitätsassistent*in) in Embedded Communication Systems

at the Faculty of Technical Sciences, <u>Department of Networked and Embedded Systems</u>, Embedded Communication Systems Group. This is a 75 % (30 hours/week) part-time position, limited to 4 years (Uni-KV: B1, <u>www.jobs.aau.at/en/faq/</u>) non-tenure track. The monthly gross salary is € 2,196.80, paid 14 times per year and can increase to a maximum of € 2,604.30 (lit.a) by taking previous experience into account. The starting date is January 4, 2021.

Duties 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

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 10,000 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 <u>Lakeside Science & Technology Park</u>. The working language is English. The department cooperates with national and international partners in research and industry.

Required Qualifications:

- A university degree (Master or Diplom-Ingenieur) in the field of electrical engineering, information and communications engineering, computer engineering, or informatics, graded no lower than "good"
- · 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 engineering mathematics and statistics
- Programming skills, three or more among: C/C++, Java, Python, MATLAB, LabVIEW, GNU radio, VHDL, CST, HFSS, Spice

Candidates must provide proof that they meet all the requirements for the appointment by **November 25, 2020** at the latest.

Additional Qualifications:

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

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.

It is our declared goal to increase the proportion of women in scientific positions and therefore we encourage qualified women to apply for the position. In case of equivalent qualification, women will receive preferential consideration.

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

We welcome applications comprising a letter of motivation, a curriculum vitae (with photo and 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), and a copy of the degree certificates and transcripts of the courses, and any certificates that can prove the fulfilment of the required qualifications listed above (e.g., the submission of the final thesis/dissertation if required by the degree programme).

Applications must be submitted online **no later than November 25, 2020** via the job portal <u>jobs.aau.at/en/</u> in the category "Scientific Staff" by pressing the button "Show vacancies", indicating **reference code 553/20** and selecting "Apply for this position".

For detailed information please contact Professor Andrea Tonello (andrea.tonello@aau.at - http://nes.aau.at). General Information for applicants is available at www.aau.at/en/jobs/information.

Short-listed candidates will be invited to an interview. Travel and accommodation costs incurred during the application process will not be refunded.

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