

Alpen-Adria Universität is seeking to make the following appointment:

PreDoc Scientist (f/m) (in German: Universitätsassistent/in)

at the **Embedded Communication Systems Group**, [Institute of Networked and Embedded Systems](#), Faculty of Technical Sciences (temporary contract for 4 years, scheme B1 www.aau.at/uni-kv, 100% employment, 40 hours/week). The minimum gross monthly salary for this assignment amounts to € 2.794,60 and can increase in accordance with the provisions of the collective agreement in the case of consideration of previous occupational experience. Planned starting date: **as soon as possible**.

Duties and Responsibilities

- Research in communications and embedded systems with focus in one of the following domains: power line communications, wireless communications, localization systems, signal and data processing, aerial robotics, 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 Institute
- Student mentoring
- Assistance in public relations activities of institute and faculty

The Embedded Communication Systems Group, led by Professor Andrea Tonello, is part of the Institute of Networked and Embedded Systems of the Alpen-Adria-Universität 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, electro mobility, aerial robotics, IoT. Current projects include research on PHY and MAC algorithms, massive MIMO, radio localization techniques, UAV dynamics, control and navigation, power grids management and diagnostics, signal and data processing inspired by artificial intelligence approaches.

The Alpen-Adria-Universität 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 [Lakeside Science & Technology Park](#). Working language is English. The Institute cooperates with national and international partners in research and industry.

Required Qualifications

- A university degree or university of applied science degree (Master or Diplom-Ingenieur) acquired in Austria or abroad in the field of electrical engineering, information and communications engineering, computer engineering, or informatics, graded with at least “good”. **The proof of compliance with this requirement must be submitted by November 1st 2018.**
- Fluent in written and spoken English.
- Experience in two or more of the following fields: communication systems, signal and data processing, wireless communications, power line communications, control theory, UAV systems, electronic measurements and instrumentation, circuits and systems.

- Profound knowledge of engineering mathematics and statistics.
- Programming skills, three or more among: c/C++, MATLAB, LabVIEW, SystemC, Maple, Java, Python, C-SHARP, VHDL, RTOS, Tiny OS, CST, HFSS, Spice, GNU radio.

Additional Qualifications

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

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

The Alpen-Adria-Universität Klagenfurt intends to increase the number of women on its faculty, particularly high-level positions, and therefore specifically invites applications by women. Among equally qualified applicants women will receive preferential consideration. People with disabilities or chronic diseases who are qualified are explicitly invited to apply.

The application must be submitted electronically in pdf format to the Alpen-Adria-Universität Klagenfurt, Dekanatekanzlei /Recruiting using the **code 584/18** via the link www.aau.at/obf.

The application must be written in German or English and include a letter of motivation, the curriculum vitae with photo as well as reports and certificates. The letter has to include information about the degree, date, place and grade. Candidates are invited to present information regarding acquired experience, thesis title or list of publications as well as further information relevant to describe the candidate`s qualification for the position in question.

Deadline for the application: October 24th 2018

Further information can be obtained on this website www.aau.at/jobs/information or by contacting Professor Andrea Tonello (andrea.tonello@aau.at – nes.aau.at).

Short-listed candidates will be invited to an interview. Travel and accommodation expenses cannot be refunded.

Translations into other languages shall serve informational purposes only. The English version alone shall be legally binding.