



The **Carinthia University of Applied Sciences** sets high academic standards in an excellent environment in Southern Austria where education, culture and technology are optimally combined. We ensure modern and application-oriented degree programs in the fields of Engineering, Management, Health Science and Social Work at superbly equipped FH-sites, with excellent teaching and research staff complemented by part-time lecturers from industry and international guest lecturers. Further Information you can find on our website: [www.fh-kaernten.at/en](http://www.fh-kaernten.at/en).



In the competence centre „**Carinthia Institute for Microelectronics (CIME)**“ and the „**Josef Ressel Centre for System-on-Chip Design Automation (SODA)**“ we are looking for experienced applicants with visibility in academic or industry for the following position:

## Junior Researcher (m/f/d) in the field of “Mixed-signal SoC and digital design”

The [Carinthia Institute for Microelectronics \(CIME\)](http://www.fh-kaernten.at/en) is a competence centre for research and development of integrated electronic systems. CIME is associated to the department of Integrated Systems and Circuits Design (ISCD) with a close network to other departments within the faculty of Engineering & IT at Carinthia University of Applied Sciences (CUAS).

The research on integrated electronic circuits and systems is a well-established discipline at Carinthia University of Applied Sciences. For more than 20 years researchers have been working on cooperative research funded by industry and national / European projects in the field of wireless and wireline communications as well as integrated sensor frontends.

Our aim in the Josef Ressel Centre for System-on-Chip Design Automation is to research fundamentally new methods for the development of “system-on-chips” in modern semiconductor technologies and to advance the automation of the development process of integrated circuits. We are closely collaborating with partners from academia as well as industry in these fields.

### Job responsibilities

- Research in the field of digital / mixed-signal integrated circuits in actual technologies such as 65nm, 28nm, 16nm
- Control-, signal-processing and related interface peripheral design
- Processor subsystem designs using e.g. RISC-V architectures
- Prototyping using FPGAs from AMD/Xilinx, Intel/Altera, Lattice etc.
- High-level modelling of analogue, mixed-signal and digital subblocks
- Virtual prototyping and HW/SW codesign using e.g. IEEE1666 (SystemC, SystemC AMS)
- Development of lab measurement setup for testchip validation
- Publication of research results

### Job profile

- Education in electronics or others with strong electronics background (like computer engineering or physics)
- Experience in design of ICs and/or electronic systems
- Proficiency in hardware description languages (HDLs), embedded software and scripting languages (eg. Python)
- Knowledge in EDA IC design tools
- Team player, self-organized, flexible, open minded and keen to try out new things

## Our offer

Carinthia University of Applied Sciences (CUAS) appreciates the motivation and great commitment of its employees and offers family-friendly conditions. We provide support with a diverse continuing education program and promote individual measures.

We offer an attractive working environment, crisis-proof employment, free campus access to [IEEEExplore](#) and other e-services, a library with option to buy books, access to a broad range of EDA software and chip technologies, possibility to join lectures on our campus as guest, trainings, a lean organisation structure and allow flexible working hours. The promotion of health, a diverse range of sports, collegial interaction, the continuous improvement of environmental performance ([EMAS certified](#)) and sustainability are of particular importance at our university. We also offer a partnership with Corplife, so you have access to Corplife Benefits purchasing discounts.

**Scope of employment:** full-time (40 hours per week)

**Start:** immediately

**Place of employment:** Campus Villach, Europastrasse 4, 9524 Villach

**Salary:** According to Austrian law, we are obliged to state the minimum salary. This is EUR 2,905.85 gross per month for a Junior Researcher (JR) position (minimum salary for full-time employment, 14 salaries). The willingness to overpay the JR position depending on qualifications and professional experience is given.

**Application Deadline:** 29<sup>th</sup> February 2024

**Note:** Hearing or interview will be organized as online-meeting using Microsoft Teams.

You can find impressions of working and living in Villach/Carinthia, Austria at:

<https://www.welcome2villach.at/>

[Carinthia - It's my life / MONTE NERO Productions - YouTube](#)

If you are interested in this position, please submit your **full application with all required documents** via our homepage: [www.fh-kaernten.at/jobs](http://www.fh-kaernten.at/jobs).

## Requested documents:

- Letter of motivation
- Curriculum vitae
- Proofs of practical experience/work certificates
- Certificates of previous school, higher education, courses, etc.

Please note: We regret that we cannot reimburse any travel costs or expenses incurred in connection with participation in the selection procedure.

We look forward to receiving your detailed application.



flexible  
working hours



education & training  
for employees



good working  
climate



creativity within  
the team



sports  
activities



home  
office



family-friendly  
university