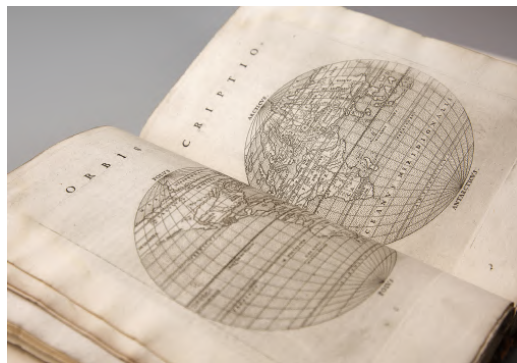




The University of Rostock offers a diverse, varied and challenging position in a tradition-conscious, yet innovative, modern and family-friendly university in a lively city by the sea.

At the Faculty of Computer Science and Electrical Engineering, Institute for Applied Microelectronics and Computer Engineering, Chair of Emerging Computing Technologies and Architectures, subject to budgetary provisions, we are filling the following position at the earliest possible date on a temporary basis for a period of three years ending (continued employment is intended):

Research Assistant (m/f/d) - Compute-in-Memory Architectures



Start date
at the earliest possible date



Working hours
full-time with 40 hours



Remuneration
pay group 13 TV-L



Location
Rostock

Tender number
W 118/2026

Limitation
limited until three years, continued employment is intended

Application time
2026-10-14

Please do not hesitate to contact us for further information:

HR department:
Pia-Lucy Dahl
Phone number: 0381/498-1292
E-mail: pia.dahl@uni-rostock.de

Department:
Jun.-Prof. Chirag Sudarshan
Phone number: 0381/498-7260
E-mail: c.sudarshan@uni-rostock.de

Modern AI and data-intensive workloads are increasingly limited by data movement between memory and computation units. This research project focuses on developing next-generation computing architectures to mitigate the memory bottleneck and achieve energy-efficient computing. The successful candidate will work on the design and implementation of hardware accelerator architectures using emerging memory technologies. The specific research details and goals will be defined together with the candidate and can be tailored according to their background and interests.

THESE ARE YOUR TASKS:

- Research in the field of Emerging Compute-in-Memory (CIM) Architectures for AI and Data-Intensive Computing with the aim of scientific qualification (doctorate)
- Develop novel CIM and memory-centric accelerators
- Develop analog and mixed-signal circuits for CIM memory peripheral circuits and compute units
- Design of digital hardware using Verilog/SystemVerilog
- Perform ASIC implementation and contribute to silicon prototypes and experimental validation
- scientific teaching in the amount of approx. 4 semester hour per week in the form of lectures in the field of Compute-in-Memory Architectures and Data-Intensive Computing, whereby the research-based transfer of specialist knowledge and skills to students is central and they are instructed to work scientifically on their own due to the scientific nature of teaching
- Publish research results in top-tier international conferences and journals
- Collaborate with academic and industrial partners

THIS MAKES YOU A GOOD FIT:

- Completed university degree (diploma, master's degree or comparable degree) in Electrical Engineering, Microelectronics, Computer Science, Physics, or a related field, with preferably very good results
- Strong background in one or more of the following areas: Analog/mixed-signal circuit design, Computer architecture, Digital design, Hardware accelerators, and emerging memory technologies.
- Motivation and willingness to contribute to innovative research project
- willingness to work seriously and with commitment on a project of one's own scientific qualification (hardware for AI and data-driven applications)
- Very good knowledge of the English language, both written and spoken
- **Preferred Qualifications are:**
 - Experience in ASIC design flow and industry-standard EDA tools
 - Experience in analog IC design or memory circuit design
 - Very good knowledge of Verilog/SystemVerilog-based hardware development
 - Previous semiconductor industry experience
 - good knowledge of the German language, both written and spoken

WE AS AN EMPLOYER:

Equal opportunities are important to us. We welcome applications from suitable severely disabled people or people from traditionally underrepresented groups. We aim to increase the proportion of women in research and teaching and therefore encourage suitably qualified women to apply. We welcome applications from people of other nationalities or with a migration background.

WE OFFER YOU:



30 days
annual leave



Health
management &
university sports



Further training
opportunities (IT,
languages,
professional
development)



Career advice for
young scientists



Mobile working



Annual special
payment/company
pension plan



Flexible working
hours



Family office



Welcome Center



Mensa -
Employee Tariff



Bicycle Leasing



day off on Dec.
24 & Dec. 31



Welcome Day



Opportunity for
Promotion

FURTHER INFORMATION:

We will determine the experience level individually, taking into account your previous professional experience.

If you would like to work part-time in this position, this is possible subject to the requirements of the position.

The temporal limitation of the employment relationship is based on § 2 (1) Wissenschaftszeitvertragsgesetz.

We look forward to receiving your application (cover letter, CV, degree certificate stating your final grade) by **14.10.2026** at the latest. We can only consider applications received via our homepage. Please send us your documents via the 'Online application' button at the end of a job offer. Unfortunately, we cannot accept e-mail applications.

Incomplete application documents may not be considered in the further course of the selection process.

Unfortunately, we can not cover application and travel costs.

Become part of the team

We look forward to receiving
your application!

Contact

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18051 Rostock
Tel.: +49 381 498 - 0

Sitze des Rektorats:

Universitätsplatz 1
18055 Rostock

Service

Legal notice
Data protection
Accessibility
Site plan
Sitemap
Organisation chart

Certificates

Familienfreundliche
Hochschule HRK-Audit

Social media

 Facebook
 You Tube
 Instagram



charta der vielfalt