



Research Associate (m/f/d) for communications engineering and RADAR applications

Job-ID: 3047/24 | Department: System Architectures | Salary: as per tariff (TV-L) | Working Time: 40h/week (part-time option possible) | Limitation: initially 2 years with option of extension | Starting Date: as soon as possible

IHP is an institute of the Leibniz Association and conducts research and development of silicon-based systems and ultra high-frequency circuits and technologies including new materials. It develops innovative solutions for application areas such as wireless and broadband communication, security, medical technology, industry 4.0, automotive industry, and aerospace. IHP employs approximately 380 people. It operates a pilot line for technological developments and the preparation of high-speed circuits with 0.13/0.25 μm -SiGe-BiCMOS technologies, located in a 1500 m² cleanroom that meets the highest industrial nanotechnology requirements.

The position:

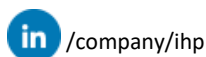
As a member of the Fault Tolerant Computing research group within the Department of System Architectures, you will contribute to research in state-of-the-art communication technologies. Your tasks will include the development and implementation of wireless communication systems with localization and sensor functionality based on RADAR. Research topics include wireless communication and localization, applications for joint communication and sensing, and RADAR applications. The project work requires a certain level of management and technical coordination with other project partners.

An international team of 10 scientists including very experienced senior researchers as well as several PhD students is looking forward to you. Flat hierarchies and mutual support are important to us. We see a diversity of perspectives as a great asset for our team. We strive for a balanced gender mix in our team.

Your tasks:

- Investigate and develop wireless sensor solutions for monitoring vital signs of farm animals
- Investigate and develop communication technologies and architectures for smart livestock monitoring
- Develop components for prototypical implementation of smart livestock monitoring
- Experimental validation of developed components and systems

Your qualifications:





You hold a Master's or Bachelor's degree in computer science, electrical engineering, communications engineering, or a related field. You have some experience in wireless communication systems, localization or RADAR applications. Some knowledge of wave propagation and communication system architectures is an advantage. Ideally, but not required, you will have a background in experimental work and embedded systems design with wireless communications systems or RADAR. Experience with standard simulation and programming languages for embedded design such as C, Python, and MATLAB is desirable. Some experience in vital signs recording and monitoring is an advantage.

You will also be a strong team player. We are looking for a team member who can structure their own work and bring a well-organized and systematic approach to working with creative minds. You will be an ideal fit for this position if you have experimental, analytical, and problem-solving skills, very strong communication skills, and the ability to quickly learn how to use the latest technical equipment, including various software. You must be fluent in English. German language skills are welcome. Further development of German language skills is expected and strongly encouraged, e.g. through in-house language courses and intensive courses.

Our Offer:

Do research in a challenging, multinational environment giving you excellent career opportunities. You will have the chance to establish international reputation at the edge of top-notch technologies.

It is important to us to support the individual career developments (e.g. conferences, advanced trainings) as well as the personal needs of our employees by offering flexible working hours and the possibility to work off-site. The compatibility of work and family is highly valued. More information about our scientific excellence and the working environment at IHP can be found on our website.

Depending on your qualifications and aspirations, this position can also be converted into a doctoral position.

IHP is TOTAL E-QUALITY-certified for equal opportunities for women and men at work and actively pursues the equality of all gender and all groups of people. We promote the professional development of women and strongly encourage them to apply. Disabled applicants, qualified according to the above criteria, will be given preference over other candidates with equivalent relevant qualifications.

Your application:

Have we sparked your interest? Then we look forward to receiving your application via our [online application form](#).

For further information regarding the position please contact Dr. Ulbricht: career@ihp-microelectronics.com.

