



#### IHP GmbH - Leibniz-Institut für innovative Mikroelektronik



Das IHP ist ein Institut der Leibniz-Gemeinschaft und betreibt Forschung und Entwicklung zu siliziumbasierten Systemen, Höchstfrequenz-Schaltungen und -Technologien einschließlich neuer Materialien. Es erarbeitet innovative Lösungen für Anwendungsbereiche wie die drahtlose und Breitbandkommunikation, Sicherheit, Medizintechnik, Industrie 4.0, Mobilität und Raumfahrt. Das IHP beschäftigt ca. 330

Mitarbeiterinnen und Mitarbeiter. Es verfügt über eine Pilotlinie für technologische Entwicklungen und die Präparation von Hochgeschwindigkeits-Schaltkreisen mit 0,13/0,25  $\mu$ m-BiCMOS-Technologien, die sich in einem 1000 m² großen Reinraum der Klasse 1 befindet.

## PhD Position (m/f/d) - for Wireless Systems

Job-ID: 4081/25 | Department: Cyber-Physical System Engineering | Salary: as per tariff (TV-L) | Working Time: 40h/week (part-time work option) | Limitation: initially 2 years with option of extension | Starting Date: as soon as possible

City: Frankfurt (Oder); Starting date (earliest): At the earliest possible; Duration: 2 years with option of extension; Remuneration: TV-L

# **Working field**

### The position:

As a member of the group Intelligent IoT Systems you will be involved in research related to developing new concepts and solutions related to the Internet of Things. Your tasks will thus cover areas related to data acquisition, processing also using Artificial Intelligence approaches and mainly on embedded devices.

Thus, the areas handled within the realized research projects will include:

- Embedded Systems (IoT, Communication protocols, C application programming, energy management)
- Sensor Data Acquisition and Processing Systems (Artificial Intelligence, Embedded computers and OS, Java, C and python application programming, Digital and Analog Signal processing, Distributed data processing)
   Additional activities in the above areas include:
- Supporting teaching activities (AI, IoT, Embedded systems and computers, sensors and actuators)
- A PhD degree will be encouraged
   An international team of researchers including very experienced senior and junior scientists as well as PhD students, is looking forward to welcoming you in their team. Flat hierarchies and mutual support are important to us. We see diversity of perspectives as a great advantage for our team and strive for a balanced gender mix

### Requirements

You hold a Master's degree in computer science with background in computer science,



electrical engineering and artificial intelligence. Strong background in AI concepts and approaches, as well as embedded systems and computers and their programming, is crucial. Your specialized knowledge preferably covers AI architectures, AI-based systems, IoT concepts, communication protocols and interfaces. You are well organized and always keep the overview even with many parallel projects. Thanks to your skillful communication you are a binding and reliable

contact person for our partners. Finally, you are also a strong team player and confidently handle the English language (German will be an advantage).

#### What we offer

Conducting research in a challenging, multinational environment giving you excellent career opportunities. You will have the chance to establish an international reputation at the edge of top-notch technologies. An orientation guide will help you to quickly integrate into the institute and to familiarize yourself with the field.

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 task includes extensive model development within the framework of the standardized technologies of IHP, as well as new developments. 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.

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.

## **Application**

Contact person: Prof. Krzysztof Piotrowski

By internet: <a href="https://www.ihp-microelectronics.com/career/vacancies/online-application-form?iob=4081/25#c977">https://www.ihp-microelectronics.com/career/vacancies/online-application-form?iob=4081/25#c977</a>

More information at <a href="https://stellenticket.de/197690/TUBS/">https://stellenticket.de/197690/TUBS/</a> Offer visible until 03/10/25

