IHP GmbH -
Innovations for High Performance Microelectronics/
Leibniz-Institut für innovative Mikroelektronik

Intern or student assistant position (m/f/d) for "Implementing AI-based gesture recognition on FPGA"

Job-ID: 3014/24 | Department: System Architecture | Working Time: 19h/week | Limitation: 3-6 months | Entry Date: as soon as possible | Salary (only if student job): as per Guideline of the State of Brandenburg on the Working Conditions of Scientific and Student Assistants

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 group within the System Architectures department you will contribute to research in AI-based hand gesture recognition. Building upon an existing flow with a commercial radar board, implemented data preprocessing in MATLAB and a pre-trained network model, your detailed tasks will include one or more of the following:

- Interfacing the output of the radar board with the Zynq Ultrascale + evaluation board via PC or directly Hardware/Software co-design of the data preprocessing of the (raw) radar data targeting the ARM processing cores on a ZYNQ Ultrascale + board
- The implementation of hardware accelerators for radar data processing on FPGA to meet timing constraints
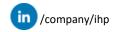
An international team of 11 researchers including very experienced senior and junior scientists as well as PhD students is looking forward to welcoming you in their team. Flat hierarchies and mutual support are important to us. We see diversity of perspectives as a great advantage for our team and strive for a balanced gender mix.

Your qualifications:

You hold a Bachelors or Master's degree in Computer Sciences or a comparable study area. You are already experienced with the C programming language and embedded programming and have experience in HDL coding. Ideally, but not mandatory you have a good understanding of signal processing and FPGA prototyping. Finally, you are also a strong team player and confidently handle the English language.

/IHPFFO   /waferffo   /company/ihp

Our Offer:

Explore a challenging, multinational environment, conduct your own early-stage research and build your career in a renowned institute at the forefront of cutting-edge technologies.

We are committed to supporting the individual career development and personal needs of our staff by offering flexible working hours and the opportunity to work remotely. The balance between work and family life is highly valued. 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.

If you are looking for accommodation in Frankfurt (Oder) for the duration of your internship, our Relocation Service will be happy to assist you.

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.-Ing. Markus Ulbricht: career@ihp-microelectronics.com.