

Open Doctoral Researcher Position

We are offering a Doctoral Researcher (Wissenschaftliche/r Mitarbeiter/in) position on the topic of:

Information Processing Factory (IPF)

As multicore Processor System on Chips (MPSoCs) are increasingly applied in Cyber Physical Systems (CPS) and in the Internet of Things (IoT), long-term reliable and networked operation without centralized control is important. To cope with complexity in such “Information Processing Factories“ (IPF) our approach is to extend systems with functions that provide self-awareness and self-optimization (self-x) capabilities. This enables runtime adaptation to changing application requirements and resource availability and also to cope with errors. The target of our work is to demonstrate these concepts for MPSoCs running applications of mixed criticality on an FPGA-based prototyping platform. The investigations are carried out together with researchers from TU Braunschweig and UC Irvine in California in a common DFG/NSF project.

For the described topic one full-time position is offered, which is available as of now. It has a limitation of 3 years with the option of prolongation. Employment is according to the TV-L wage agreement group E13. Condition for employment is a Master's degree in electrical or computer engineering. Previous knowledge and experience in several of the following areas is required:

- Microprocessor and multi-core architectures,
- Networks-on-Chip,
- Digital circuit design,
- Xilinx FPGA platforms and the associated design flow / tools,
- VHDL, SystemC

Qualified applicants are invited to send their application documents (CV, certificates and any other relevant papers) to:

Prof. Dr. Andreas Herkersdorf
Technical University of Munich
Chair for Integrated Systems
Arcisstr. 21
80333 Munich

Email: lis@ei.tum.de

Application documents sent via postal service will not be returned but destroyed in compliance with privacy protection rules.

TUM is especially encouraging minorities and women to apply, because of its strong commitment to diversity in engineering education, research, and practice. In case of equal qualification handicapped persons will be preferably employed.