

BECOME PART OF OUR SUCCESS STORY WITH YOUR CAREER!

SmartRay is specialised in 3D Sensors for inspection, guidance and measurement that help manufacturing companies to improve product quality, guide automation and reduce production costs. By focusing on 3D, SmartRay has built a comprehensive portfolio of products designed to solve a rapidly increasing range of industrial applications.

The FPGA design team develops the integral part of the embedded system, which is the core of SmartRay 3D sensors. The FPGA design includes the 3D data extraction algorithms and the interface to the peripherals like CMOS Imager, Memory and Hard Processor System (HPS).

We are looking for a:

DOCTORAL CANDIDATE: APPROXIMATE COMPUTING FOR 3D DATA PROCESSING FPGA DESIGN (M/W)

YOUR KEY RESPONSIBILITIES:

High power consumption in the embedded system of 3D sensors is a performance critical factor. It directly affects the measurement accuracy of 3D sensors.

SmartRay is investigating state of the art approaches to reduce power consumption in the FPGA design of its sensors. Approximate Computing is a novel approach to save power by allowing possibly inaccurate results in modern hardware architectures.

In scope of the offered position, SmartRay plans to investigate the applicability of Approximate Computing methodologies to 3D data processing FPGA design.

The project is carried out in cooperation with TUM and ARRI.

YOUR PROFILE:

- Master's degree in electrical, computer engineering or a similar qualification
- Previous knowledge and experience in several of the following areas are required:
 - Digital circuit design
 - Hardware description languages, VHDL, Verilog or SystemVerilog
 - Intel Altera or Xilinx FPGA Design Flow and associated Tools i.e.
 - Quartus, Qsys, Vivado, ISE
 - Programming languages C, Python
 - Image and video processing (nice to have)

WHAT WE OFFER:

- Working on state of the art embedded systems for Machine Vision
- Open and flexible working environment
- Working in an international team
- Challenging job responsibilities with learning and growth opportunities
- Possibility for long term employment in a rapidly growing company

The offered position is full-time and is available as of now. It has a limitation of 3 years with the possibility of further extension.

Do you meet these requirements and want to submit an application? We look forward to hearing from you! Please send us a comprehensive application, including earliest possible starting date via email to: bewerbung@smartray.de Contact: Stefanie Ostermeier