



For the **RF and SatCom Systems** department in **Erlangen**, the Fraunhofer Institute for Integrated Circuits IIS is currently seeking

Interns or Student Assistant (m/f)

For the topic DVB-S2X wideband signal processing

In the field of satellite communication, Fraunhofer IIS is researching the satellite technologies of tomorrow. Future television services and broadband access will require the transmission of growing volumes of 3D-TV and 4k data via satellite. For this reason we are currently carrying out research and development activities in the area of broadband signal processing.

In this area we are developing and enhancing a DVB-S2X broadband receiver that is setting new benchmarks for throughput and transmission robustness. The required digital signal processing is performed by a field programmable gate array (FPGA) optimized for fast processing speeds and high clock rates. In this context, we offer internship positions or student assistant positions to interested master students to support our team.

Your responsibilities

- Learn the ropes of the existing VHDL code modules
- Enhance modules for wideband processing
- Optimize modules w.r.t. algorithm improvements
- Create or extend test benches for simulation of the modules
- Verify and document the made modifications as well as performance enhancements

Your profile

- A degree in (or you are currently studying) electronics and information engineering, computer science or a similar field
- An interest in satellite communications
- Good knowledge of digital signal processing
- Experience in VHDL programming, advantageous: RTL Simulation (Modelsim) and FPGA Synthesis and Backend
- Experience with common programming languages such as MatLab, Python or C/C++ (advantageous)
- Familiarity with MS Office

What you can expect from us

- An open and cooperative working environment
- Collaboration in interesting and innovative projects
- Many opportunities to gain practical experience
- Flexible hours that allow you to balance your work and study activities

Interested?

Join our team and work with us on the technology of tomorrow!

Send your resume in PDF format to personalmarketing@iis.fraunhofer.de and reference 374598 and let us know how you learned about this opportunity.

For more information about the institute and its products and services, please visit: www.iis.fraunhofer.de