

Working Student

Real Time Signal Processing on RFNoC SDR

We are seeking a highly motivated student to contribute to the implementation and evaluation of real-time signal processing functionalities using the RF Network-on-Chip (RFNoC) and UHD (USRP Hardware Driver) framework [1, 2].

The candidate will work on the design, implementation, and testing of RFNoC-based modules for real-time applications on software-defined radio (SDR) platforms. The work will involve close interaction with FPGA-based architectures and high-throughput data processing chains, with a focus on performance, latency, and reliability in real-time environments.

Your qualifications:

- Knowledge of mobile communications, signal processing
- Experience with software defined radios and RFNoC
- Programming experience in MATLAB, Python, or LabVIEW
- Goal-oriented and structured work style
- Verilog/VHDL skills are a plus

To apply:

Please send your application by e-mail to Peter Gu (peter.gu@tum.de with the subject "**Working Student: RFNoC**"), including the following documents:

- Curriculum vitae
- Academic transcript
- Short motivation (0.5 - 1 page)

[1] <https://www.ettus.com/sdr-software/rfnoc/>

[2] <https://kb.ettus.com/UHD>