Julius-Maximilians-
UNIVERSITÄT WÜRZBURG

ZFT ZENTRUM FÜR TELEMATIK E.V.

Informatik VII:
Robotik und
Telematik

Extension of Groundstation Toolchain (Bachelor/Practical/Master)

For the NetSat CubeSat mission (currently in orbit) and upcoming missions in addition to the conventional setup, GnuRadio and custom software extensions are used for telemetry reception. This provides for additional possibilities to analyze and visualize real satellite signals.

Possible Tasks

- Extension with new Signal Analysis Tools (GnuRadio modules)
- Further optimization of the high level toolchain (control of flowgraph, representation and forwarding of data)
- Automatic postprocessing of recorded IQ data

Required Previous Knowledge

Depending on task:
Python, C++, Java, typical build tools (make etc.), interest in signal processing

Language

German or English

Contact via Mail or Video Chat

Alexander Kleinschrodt: alexander.kleinschrodt@telematik-zentrum.de
Eric Jäger: eric.jaeger@telematik-zentrum.de
Tim Horst: tim.horst@uni-wuerzburg.de