



Time Synchronization in 5GTQ

Description of Research Topic

October 23, 2024

Title: "Time Synchronization in 5GTQ"

Supervisor: Rubi Debnath

Context

5G-TSN integration will enable wired-wireless communication in the network. In our previous work we developed the 5GTQ framework for the 5G-TSN integration. In this topic, the student will perform gPTP time synchronization experiments in the 5GTQ framework.

Requirements

- **Knowledge of computer networks, TSN and/or 5G.**
- **Very good C++ programming skills.**
- **Experience with OMNeT++ simulation tool.**
- **Should be motivated to work on research topics and read research papers.**
- **Networking Knowledge: Familiarity with networking concepts routing, VLANs, and network protocols.**
- **Strong research capabilities to conduct literature reviews, analyze existing research, and identify research gaps.**
- Independent and able to work with minimal supervision.

Contact

If you are interested in this topic, please send your full application (CV, current transcript of records, research interests, possible start dates) to Rubi Debnath (rubi.debnath@tum.de).