

Master's Thesis

Optimized MAC-Algorithm for Decentralized Communication Systems with Directional Antennas

The master's thesis project "MAC Algorithms for Radio Communication Systems" at Rohde & Schwarz is part of the development of a future wireless aeronautical communication system and includes the following aspects and topics:

- Extension and enhancement of MAC-algorithms for wireless communication with directed antennas and distributed reservation.
- Optimization of throughput and coordination between the users.
- Investigation of the performance w.r.t. protocols of higher layers like TCP and UDP.
- Implementation of these algorithms with interfaces to the network simulator OMNEST/OMNET++.
- Investigation of the performance by simulation.

Advisors

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