

Open Semester Project (HS18, FS19):

Experimental Performance Evaluation of a Wireless Indoor Localization Scheme

Contact: Robert Heyn, hey@nari.ee.ethz.ch, ETF F105

Gregor Dumphart, dum@nari.ee.ethz.ch, ETF F106

Enabling wireless localization in GPS-denied indoor environments is an important goal of wireless research. Recently, a scheme has been proposed conceptually which promises robust performance in dense environments with low infrastructure cost.

Tasks

- Conduct wideband channel measurements in our office environment.
- Run the localization scheme on the measured data. Thereby, employ state-of-the-art algorithms for certain subtasks.
- Evaluate the practically achieved performance.

Prerequisites

- Attended an ITET master-level lecture on wireless communications.
- Ability to acquire, process and interpret measurements.
- Matlab and programming skills.