Open Thesis / Project
Modeling an Angle-of-Arrival localization system

Motivation

Ultra-wideband (UWB) is a recent trend within localization, able to provide accurate location estimations in a sub-decimeter level. This technology can now be found in the IPhone 11! Recently, an UWB system was released in the market featuring angle-of-arrival capabilities. This enables a device to accurately localize another one without the help of third parties. There are rumours that a similar mechanism will also be implemented by Apple. So far, all the technical information available regarding this kit is provided by the manufacturer. Further evaluation is still required. Your job is to evaluate and characterize this kit.

Interested? Please contact us for more details!

Target Group

Students in ICE/Telematics, Electronics and related.

Thesis Type

Master Thesis (Duration: 6 months).

Goals and Tasks

- Program embedded devices;
- Design and conduct experiments;
- Analyze results and derive an analytical model;

Requirements:

- Good programming skills: C + Python;
- Experience with Apache Mynewt OS is a plus;
- Solid statistical basis;
- Thoroughly perform practical experiments.

Used Tools & Equipment

- Modules (provided by us)
- A Laptop
- Additional equipment required by the tests.

Contact People

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