



DVB-T Positioning Implementation

Every new smartphone and many other devices such as cameras contain GPS receivers to determine the location of the user. But in cities and indoors the GPS reception can be impossible.

Therefore, we are interested in using other signals such as the digital TV signals DVB-T for localization. These signals of opportunity are interesting for localization because they can be used without any infrastructure cost and provide higher received power than GPS.

The goal of this project is to implement the localization using the DVB-T signals and evaluate the localization performance. There already exists software to receive these signals from a previous project that can be improved to allow localization. Also other signals can be considered to be used for this purpose.

We have some ideas how to approach this task, but we would love to hear your take on this as well! If this sounds interesting to you, do not hesitate to contact us so we can have a chat.

Requirements: Programming experience is an advantage. There will be weekly meetings with your supervisors to discuss progress and open questions.



Interested? Please contact us for more details!

Contacts

- Simon Tanner: simon.tanner@tik.ee.ethz.ch, ETZ G97
- Gino Brunner: gino.brunner@tik.ee.ethz.ch, ETZ G63