



Smartphone Aircraft Localization

While GPS is great for outdoor localisation, it does not work well indoors and in urban canyons because of low received signal strength and multipath signals. Alternatives such as WiFi based methods have limited range and thus are only available in neighborhoods with a sufficient number of base stations.



An alternative localization method has been developed in our group. It leverages signals sent by aircraft to localize a user. As aircraft signals can be received hundreds of kilometers away from an aircraft and due to the dense air traffic in many countries, this system can be considered to be available in most populated areas. Compared to GPS, the received aircraft signals are much stronger and therefore can even be received indoors.

The goal of this project is to port the existing code for Raspberry Pis to an Android app. This should enable simpler testing of mobile receivers and could also be used for demonstration purposes.

Requirements: Creativity and programming skills are advantageous. The student(s) should be able to work independently on this topic!

Interested? Please contact us for more details!

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