



BA/MA/SA/Group/Lab:

Sensing with Android

The ubiquity of mobile phones makes them very attractive as a mobile sensing platform. New generation mobile phones like the iPhone or Android-based phones already have some integrated sensors (GPS, accelerometer). Additional external sensors, e.g. for temperature, air pollution or heart rate, can sense a persons environment. Measurement data can then be sent to the mobile phone where it is further processed by an application or forwarded to a central server using the mobile phones Internet connection. At our lab, we developed different external sensors that can connect to Android phones.

An example of a sensor platform that was developed during a thesis are pressure sensitive insoles that measure the pressure distribution on the feet and transmit it wirelessly to a smartphone. These insoles can be used for medical applications as well as for sports.

The goal of this thesis is to develop a new external sensor that can be used in combination with a smartphone or to develop an application that uses the integrated sensors of an Android device in a new and creative way.

We envision many different possible theses in that field and are open for your ideas. Please come by and talk to us about your ideas.



Requirements: Experience in hardware design and/or programming is of advantage.

Interested? Please contact me for more details!

Contacts

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