

## Optimizing Smart Mobile Crowdsensing Apps

Mobile crowdsensing is the method of acquiring user experience data from users. Either in an automated fashion without limited user engagement, for instance using embedded sensors of the smartphone. Or in a participatory fashion, where the user is the main responsible for the provision of data, for instance filling out surveys.

With regard to this, we have developed an app that acquires user experience data related to weather in both - automated as well as participatory fashion. However, using multiple embedded sensors of the smartphone consumes resources, battery, as well as storage.

For successful completion of the project, the student is required to work on the existing mobile crowdsensing app. More specifically, in the project, the student will have the options to work on optimizing battery consumption, limiting resource usage, optimize sensor data storage, or improve the sensor data accuracy. Or the student has the freedom to suggest his own vision about extending the current app.

The successful completion of the project requires the student to actively participate in the project meetings, deliver the tasks on time, write a project report and present their work at the end.

**This project is ideal for you, if you are familiar with any of the following:**

1. Smartphone development frameworks (iOS or Android) and GUIs
2. Mobile databases, e.g. SQLite



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If you interested in further details about the thesis topic, please drop me an email, I'll be glad to further discuss the possibilities with you.

