# Development of participatory sensing platform on top of android system environment using RESTful web services and modular Java design using OSGi framework, achieving real time software updates without pausing any running service.

During the preparation of this thesis, a participatory server platform was developed that is able to take measures and run tests, using data received from multiple users.

With the term participatory, we mean that the data are being provided to the server by volunteers who they installed an android application on their mobile phones. This android application is also developed during the preparation of this thesis and acts as the client in the developed system.

The communication between the server and the android application is achieved using RESTful web services. Moreover, the android application is mainly based on modular design by using the service platform of Open Services Gateway initiative (OSGi).

The data received by users, which are mostly being retrieved by the mobile device’s sensors, are easily customizable due the OSGi modular design.