

<b>Project:</b> ParticipAct	<b>Document:</b> Participatory mobile sensing experience
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## ParticipAct

ParticipAct is the world's first experiment, which involves the collection of data in the urban context from mobile phones of users who use social networks and move in an uncoordinated way, usually following some pattern.

The experiment has the peculiarity of being long-term, one-year data collection on a large number of students (about three hundred or more) to obtain information about phone's use patterns and social behaviors. The data will be analyzed to obtain a correspondence between the state of the students, their location and interaction models, both low-level (Bluetooth and WiFi connections) and high-level (social network interaction and students knowledge).



The experiment goal is to design a data collection in order to quickly get the knowledge of the areas explored by users and manage any emergency or unexpected situation.

The data collected, properly analyzed and correlated, lend to different types of technical and social analysis. Some possible directions are:

- *Quantified self.* The set of processes to distill personal data about a single individual to carry out self-monitoring which allows to answer questions such as: where I perform more physical activity? How much time I spend traveling?
- *Technological enhancements.* The set of analysis techniques that exploit technical and social information to allow the control of technical parameters. Some examples are the enhancement of the connection quality by exploiting information on the users mobility, or the management of data caching to improve network performance.

- *Urbanism.* The aggregate of the data provided by users allows to obtain information on citywide scale, for example by identifying the places with more social activities, transportation lines overloaded, the students preferred areas for physical activities such as jogging and cycling.

These are just some examples of the information that may be obtained from this dataset. Overall, the quantity and quality of data will be enough to represent a solid resource for researchers in several fields, including engineering, psychology, sociology, and management.

The experiment is characterized by a long duration (one year), a large number of participants (about three hundred) and a high variety and amount of data collected. These characteristics make it highly innovative.