Software Engineering Labs
3IF, INSA Lyon

AirWatcher Data Set Description

Some information about the data set is given below.

- There are a total of 100 sensors located on a grid on the map of France.
- There are 4 measurements (one of each of the 4 types: O3, SO2, NO2, PM10) per sensor per day for a period of 1 year.
- All measurements are taken at the same time every day.
- The measurements of the sensors are coherent with the sensors in the neighborhood. This means that it is probable to find similar measurement values of the same type among sensors that are in immediate vicinity.
- There are two private individual users.
- One of the private individual users is honest. Whereas, the other one is dishonest. The dishonest user's sensor generates false data.
- There are two air cleaners.
- One of the air cleaners is ineffective and thus has no impact on the air quality. Whereas, the other one is very effective and has a strong impact on measurements generated by surrounding sensors during the period of its operation.
- You are required to discover information such as the identity of the dishonest user, the identity of the effective air cleaner, the radius of the cleaner's impact, etc. through the functionalities provided by your implementation of AirWatcher.