



# ICT DAYS

## U-Hopper

### Offerta: lavoro e stage

#### 1. Social User Characterization

U-Hopper's customer intelligence service Tapoi ([www.tapoi.me](http://www.tapoi.me)) collects user social activities (from sources like Facebook and Twitter) and semantically analyze them to build models aimed at understanding user's interests.

The candidate will expand on the current implementation by investigating and experimenting with new approaches of user modelization (e.g. combination of multiple "basic" models interests, demographic, movements, ...) and study methodologies to apply such profiles to life-event prediction and/or product and services recommendation.

Keywords: data-science, machine-learning, spark, scala, python

#### 2. Traffic and Queue detection for indoor location systems

Indoor location systems can be used for tracking people and assets in various environments. One feature of interest is the detection of circumstances with high traffic that can slow down the flow of customers in a grocery shop or of assets in an industrial process. A similar problem is instead the detection, and measurement, of queues for accessing a resource (a supermarket register line, a given operation in a industrial process). Both online and batch solutions are viable. The algorithms should analyze all the tracks of assets' location in the system to find critical situations. Furthermore they should be robust enough for accounting the fluctuations dues to the localization system and the intrinsic precision errors. The development of such algorithms will be carried out using Hadoop and Spark.

Keywords: data-science, machine-learning, spark, scala, python, time-series

## **Presentazione delle figure ICT:**

Link alla presentazione:

<https://docs.google.com/presentation/d/1fhTGzILSS8bVGQZPH8XQEZI4hTCdSul5N3UrDuyz4O8/edit?usp=sharing>