# Location-sharing on Facebook: Where, When, Why and quick introduction to the PVNets project

http://www.pvnets.org







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#### **PVNets overview**



- The PVNets project aims at understanding how people deal with privacy
- How much do citizens and customers care?
  - Companies: gathering data to offer personalized service to the customers



- Many other case studies:
  - Financially excluded, family and customer relationship, IPS, ...
  - Location-sharing on Facebook



#### **Location-sharing on Facebook**

- To understand:
  - Why do students share their location
  - How (text, picture)
  - When
  - To whom they share this location
  - At what locations are they more willing to share

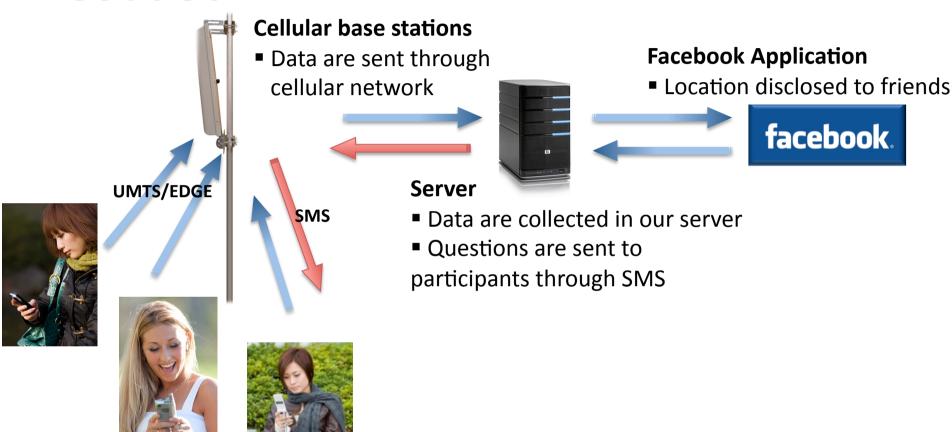
#### Methodology

- 40 participants for one week
  - pre-briefing session
    - consent form, friends list, Facebook app installation
  - carrying a mobile phone and replying ESM questions for 7 days
    - ESM stands for Experience Sampling Method: getting the participants to report their ongoing experience.
  - de-briefing session
    - 30 min interview





#### **Testbed**



#### Mobile phones carried by students

- Location retrieved with embedded GPS
- Subjects answer questions (e.g., sharing choices)

#### **Example**



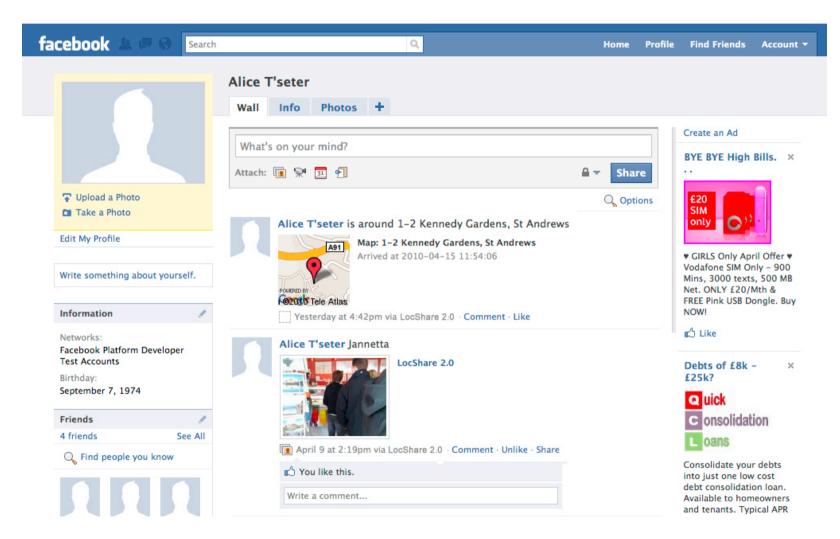
#### **Example**

- We also ask for participants' feeling while being tracked
- When a stop is detected, we ask to whom the location should be shared: nobody, everyone, all friends, members of friend lists





#### **Example**



#### Fehmi Ben Abdesslem

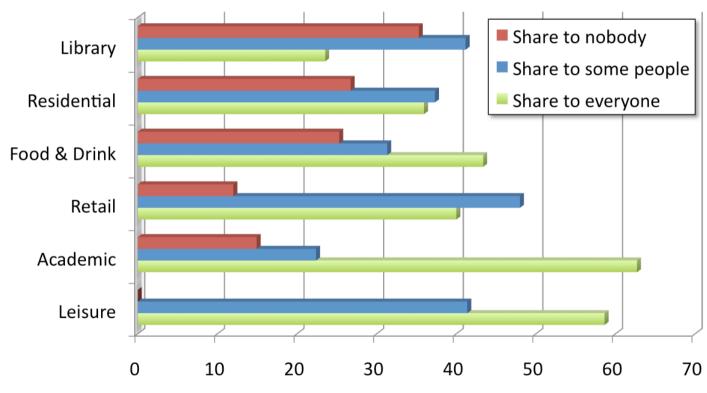
School of Computer Science University of St Andrews

#### **Preliminary Results**

40 participants answered 2054 questions

Are locations shared differently depending on the type of location being shared?

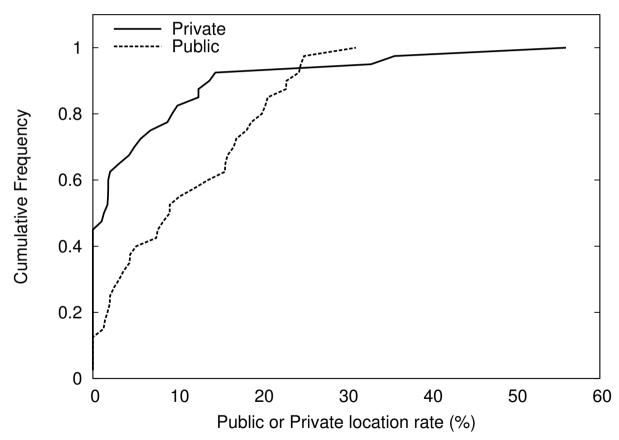
Participants are more willing to share their location when they are in 'Leisure' or 'Academic' locations than in the 'Library' or in 'Residential' areas.



Percentage over total sharing choices for each location type

#### **Preliminary Results**

Distribution of sharing choices by participant:



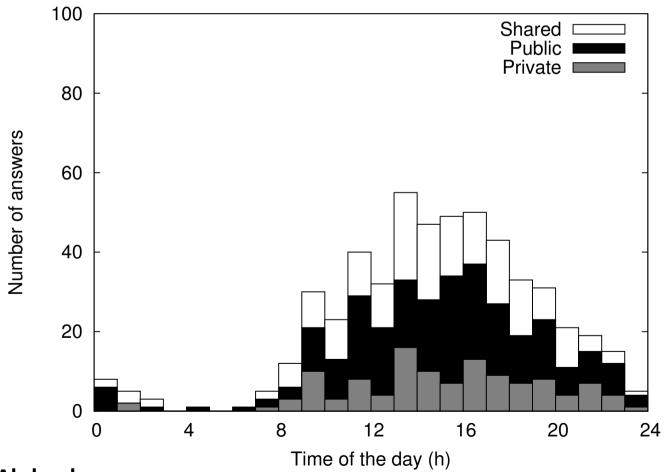
Public/Private location rate = percentage of locations shared to nobody (**Private**) or to everyone (**Public**)





## **Preliminary Results**

Questions asked and answered per hour of the day



#### Summary and ongoing work

- We propose a methodology based on ESM to collect data about privacy concerns and behaviours of people sharing their location on Facebook with mobile phones
- Preliminary results show that students were more willing to share their location when at the a Leisure/Academic place than at the Library or at home
- Still plenty of data to analyse, e.g.:
  - Photos
  - De-briefing Interviews
  - Data shared without being prompted
  - Facebook interactions
- Improve battery life of devices (e.g., when uploading)
- Run the same experiment in London: UCL staff and students
  - Are the conclusions drawn in St Andrews valid for UCL students?
  - Do staff (Library and Estates) have same privacy concerns and behaviours as students?



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