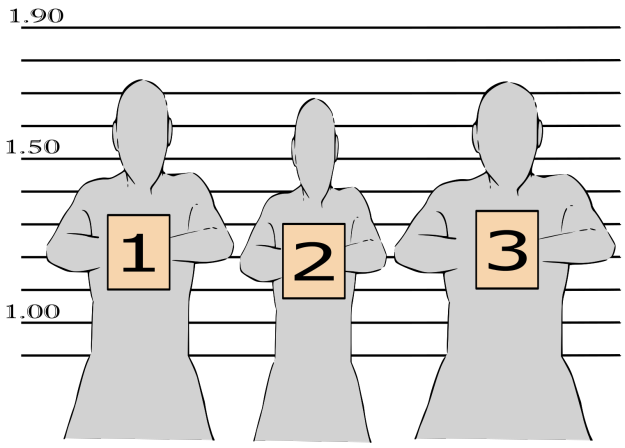
Thesis Proposal (MA)

Ambient Identification of Users

Outline

Location-based services offer targeted information based on the location of a user. For future Smart Space environments it is interesting to locate users based on features they carry. Today many users carry gadgets such as smartphones.
The goal of this thesis is to develop a prototype that reliably identifies users by fingerprinting relevant properties including gadgets.
Suitable passive sensors for this work include Passive Infrared Sensors (PIR), electro-magnetic proximity detectors, and ultrasonic distance sensors. Suitable active sensors include wireless network access points and Bluetooth sniffers.
More sensors are to be identified.



Possible Structure

- Analysis
  - Analyze the problem domain.
  - Identify relevant research questions that you will work on.
  - Present relevant technology.
- Related work
  - What do other projects do that answer your questions?
- Design
  - Which components do you need?
  - Which are options for the design? Why are your choices good?
- Implementation
  - Relevant details such as frameworks used.
- Evaluation
  - How well does it work?
    - Metrics!

Requirements

Curiosity, Joy to work in a team, Knowledge in Java.
Ability to write good code (including unit tests and documentation).

Contact

If you are interested, please send an email briefly explaining why you think to be the right person for this thesis to:
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Distributed Smart 2pace Orchestration System

ds2os.org/