Semantic-aware Location Privacy: An Android Library

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An Android Library for Widespread Protection

- Android library and an application that integrates a mechanism to protect user’s location privacy considering:
  - location semantics fetched from OpenStreetMap
  - Sensitivities based on location semantics and geographical locations

Android Privacy Library

Integrated with the tinyGSN android application for general purpose mobile sensing.
The adaptive location privacy protection approach considers users’ privacy preferences w.r.t. certain locations and location types, and adaptively tunes protection techniques such as obfuscation and hiding.

Semantic Information in Location Privacy

Need of privacy protection mechanisms (e.g., obfuscation, hiding)
Disclosure of Geographical / Semantic Location in a Mobile environment
Semantic Information influences substantially on the location inference

Human-centric Applications

Active Internet Presence → abundant data disclosure on Internet platforms (e.g. OSNs)
Human as sensor → infer context of users from mobile data and social networks

Location-Privacy in Continuous Data Disclosure

References