SOFTWARE FOR PRIVATE PROXIMITY-BASED SOCIAL NETWORK INTERACTIONS

UC Case 2015-412

AT A GLANCE

The invention is cryptography software for social networking. It is a method and a system for discovering and discretely interacting with nearby peers without connection to any other social network or even internet.

ADVANTAGES

- Application does not require continuous internet connection
- Outstanding privacy protection from both peer users and the OSN
- Outstanding authentication of exchanged data protocol
- Slim server component

SUGGESTED USES

Secure local social networking in low/no connectivity environments based on robust authenticity of underlying data

DESCRIPTION

There exists a variety of networking applications, such as Highlight and Facebook Nearby Friends, which let users find nearby people with similar interests. However, none of the currently available networking solutions allow for simultaneous exchanged data authenticity, privacy (including location data), scalability, and independence from both internet and GPS.

Researchers at the University of California, Irvine have developed methodology and software that, when implemented on a private proximity-based social network (whether as a stand-alone app or applied to an existing social network like LinkedIn), will help users to connect with local peers of interest in a very secure and efficient manner without relying on continuous internet connection or GPS. The proposed method relies on novel cryptographic protocol that guarantees privacy (including location) against both the other users and the social network, yet provides robust user authentication.
Once installed, the software will let a user adjust his or her settings of interest, such as common friends or colleagues, education background, and employment. These settings will then be used to locate nearby users with similar objectives. The settings can be continuously adjusted to meet the users’ changing needs or circumstances. This methodology does not require internet connectivity (e.g. can be used on an airplane) yet, when activated as an app, will alert the user of proximate, potentially beneficial connections.

STATE OF DEVELOPMENT
Working prototype is available

PUBLICATIONS

PATENT STATUS

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