

CONTACT

Information sharing between strangers with hyperlocal community wireless networks

Today it becomes more and more difficult to engage people living in physical proximity in common activities and to compete for attention with global online social networks. To encourage strangers in the city to get in contact with different others without sacrificing their privacy, this project will explore the use of open source social software and wireless technology to support spontaneous information sharing in urban contexts, outside the public Internet, using as its communication infrastructure a hyperlocal community wireless network (CWN).

Imagine, for example, a neighbourhood festival in a square or a park with local food, etc. People are in a neighborly mode but most of them would have to overcome a psychological barrier in order to engage in discussions with strangers. To encourage people to interact more with their neighbors, the local organizers can place a few CONTACT nodes in a strategic location and invite people to a hybrid, virtual and physical, information sharing game. Alternatively, such interactions could take place over time, mediated by a CONTACT node placed in a strategic location in a public space or in the neighbourhood and configured according to the specific environment.

A CONTACT node consists of a wireless access point (i.e., a raspberry Pi equipped with a WiFi dongle) mounted on a mobile container. Then a captive portal running on the wireless access point will welcome users connected to its SSID with a simple information sharing application (e.g., asking them to reply to an interesting question of local interest). In airports, hotels, or coffee shops, such web pages welcome users before granting them access to the Internet. The CONTACT portal instead will host only interactions within physical proximity. It will collect all this input from the various access points and will display it with informative and entertaining visualizations on the local page and/or will project it on the facades of buildings.

In summary, the minimum expected outcomes of the project are the following:

- 1) The basic setup of the CONTACT node, a wireless access point with a captive portal
- 2) A simple customizable web information sharing application provoking interactions amongst people in geographical proximity, running as a captive portal hosted on the CONTACT node.
- 3) A data collection process and an evaluation methodology of different real-life experiments in different locations.

Related publications

Antoniadis, P., Ott, J., & Passarella, A. (2014). Do It Yourself networking: an interdisciplinary approach (Dagstuhl Seminar 14042), *Dagstuhl Reports*, 4 (1), 125-151.

Antoniadis, P., Apostol, I, Unteidig, A., & Joost, G. (2014). CONTACT: Facilitating Information Sharing Between Strangers Using Hyperlocal Community Wireless Networks. UrbanIXD Symposium 2014, Venice, Italy.

See also <http://nethood.org/links.html> for related projects

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