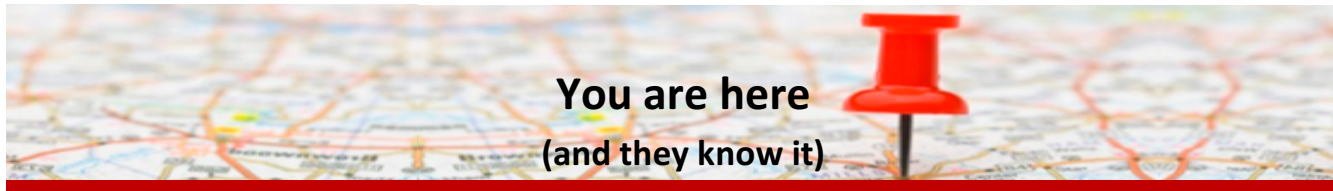


PRIVACY IN MOBILE AND PERSVASIVE NETWORKS – RESEARCH ACTIVITIES AT EPFL, SWITZERLAND



<http://lca.epfl.ch/projects/privacy-mobile-pervasive/>



This last decade has witnessed a wide adoption of connected mobile devices able to capture the context of their owners from embedded sensors (GPS, Wi-Fi, Bluetooth, accelerometers). The advent of mobile and pervasive computing has enabled rich social and contextual applications, but the use of such technologies raises severe privacy issues and challenges. The privacy threats come from diverse adversaries, ranging from curious service providers and other users of the same service to curious applications running on the device and eavesdroppers. The information that can be collected from mobile device owners includes their locations, their social relationships, and their current activity. All of this, once analyzed and combined together through inference, can be very telling about the users' private lives [9].

One of our research missions at the Laboratory for Communications and Applications 1 (LCA1) is to identify privacy threats in mobile and pervasive networks [7], quantify the privacy of the users of such networks [6,10,13], and design efficient privacy protection mechanisms [1,2,3,5,9,11,12]. We also study various peripheral aspects of privacy, including usability [2,4,8] and the economic viability of the considered services and technologies. In addition to its analytical dimension, our research has a strong experimental component that involves field studies, data collection campaigns and user surveys, made possible by collaborations with strategic partners.

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