Title: Website for raising awareness of tracking the users on the Web

Topic:

On the Web, companies continuously compete in tracking Web users, building their profiles and monetising the profiles they build [1]. There are many difficulties in establishing socio-technical protections for Web users. However, a first step consists in the identification and awareness of the many ways Web tracking can be done.

This internship aims at providing a Web application, where each user can perform a series of tests in order to determine: (1) all information that can be collected and used to identify and characterise the user (OS, language, fonts, IP, installed extensions, etc.) (2) all explicitly accessible mechanisms to track the user (cookies, TSD, http headers, storage, etc.) or potentially derivable.

The site will have two goals: (1) provide an analysis tool, awareness and educational (2) collect data and maintain anonymous statistics about user configurations in nature. The site will be hosted, secured and maintained on a dedicated virtual machine INRIA. It must be internationalised (French, English, Spanish, etc.) by cooperating with bilingual colleagues of INRIA to allow wide dissemination.

The work program will be:

- (1) establishing a state of the art about the means of identification, reidentification and tracking users on the Web
- (2) design of algorithms that are able to detect these techniques for a user given a site he is connecting to
- (3) generating a self-contained report that can be used as a teaching material of all means of identification and re-identification and tracking
- (4) creation of an anonymous statistical database on all means of identification, re-identification and tracking that was observed via site's users

Inviting team: WIMMICS in cooperation with DIANA et INDES teams (INRIA Sophia Antipolis)

Supervisors: Fabien Gandon, Nataliia Bielova Arnaud Legout.

Salary: regulatory gratification

[1] http://www-sop.inria.fr/members/Nataliia.Bielova/slides/2016-02-11-WIMMICS.pdf