Computer science and legal methods for enforcing the personal rights of non-discrimination and privacy in ICT systems

A FIRB (Italian Fund for Basic Research) Project – Call “Futuro in Ricerca 2008”. 1 Dec. 2010 - 30 Nov. 2013

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ICT Pervasiveness
ICT services are provided based on personal data collected at extreme detail and at mass level

ICT Threats
While on one side the use of ICT technologies brings great benefit to everybody, on the other side the massive collection of our personal data poses new challenges to enforce fundamental rights: privacy and non-discrimination

Privacy threat
User’s identity and sensitive information could be discovered from the locations reported to ICT services

Non-discrimination threat
ICT services for automated credit scoring could use residence as a proxy for race or gender to deny credit to minorities

Project Objectives
Starting from the requirements derived by the current regulation and legal debate, we intend to develop formal models and technical tools to enforce the intertwined personal rights of non-discrimination and individual privacy.

❖ On the legal perspective, our objective consists of a systematic and critical review of the existing regulations, and in the design of quantitative measures of the notions of anonymity, privacy and discrimination that are adequate for enforcing such personal rights.

❖ On the computer science perspective, we aim at designing legally-grounded technical solutions for discovering and preventing discrimination in Decision Support Systems (DSS) and for preserving and enforcing privacy in Location Based Systems (LBS).

We aim at a new approach in the development of ICT tools consisting in the native integration of legal norms and resulting in a technical standard which is legally recommendable and socially trustworthy.

For further information, please contact the project coordinator: Salvatore Ruggieri, Dipartimento di Informatica, Università di Pisa, ruggieri@di.unipi.it