Identification (and Obfuscation) in the Smartphone Era

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Abstract: An increasing number of mobile users is actively sharing their location and other personal information through a variety of applications and services. Many mobile applications are continuously collecting location data that allow service providers to map user movement and profile users, for example for marketing applications. The same is true for the majority of the most popular social networking platforms, which offer the possibility of associating the current location of users to their posts and photos. Conversely, this type of data can be used to identify individuals, for example for crime prevention and national security.
In this talk I will give an overview of the work of my lab in the area of user identification and profiling using sensor data from smartphones and online social networks. I will discuss the challenges and opportunities in this area and I will outline our research agenda for the coming years.

Bio: Mirco Musolesi is a Reader (equivalent to an Associate Professor in the North-American system) in Data Science at University College London and a Turing Fellow at the Alan Turing Institute, the UK National Institute for Data Science and Artificial Intelligence. At UCL he leads the Intelligent Social Systems Lab. He held research and teaching positions at Dartmouth, Cambridge, St Andrews and Birmingham. He is a computer scientist with a strong interest in sensing, modelling, understanding and predicting human behaviour and social dynamics in space and time, at different scales, using the "digital traces" we generate daily in our online and offline lives. He is interested in developing mathematical and computational models as well as implementing real-world systems based on them. This work has applications in a variety of domains, such as intelligent systems design, ubiquitous computing, security&privacy, and data science for social good. More details about his research profile can be found at: http://www.ucl.ac.uk/~ucfamus/