Tutorial 3:	**Observation, Analytics and Anonymity Techniques**
Responsible Lecturers:	**Prof. Dr.-Ing. habil. Peter Sobe** Dr.-Ing. Thomas Kemmerich Prof. Dr. rer. nat. habil. Martin Leucker
Language:	English
Teaching Method:	Practical exercise / Lab
Attendance requirements:	Students are invited to bring their own laptop
Goals / Skill:	The objective of this tutorial is to understand the tracking and observation techniques, to provide knowledge on countermeasures and to sensitize to possible use and misuse. In order to study the techniques behind observation, tracking and analytics, a number of small web applications are provided that can be accessed by the students. These are a search interface, a position lookup and map application, and a picture sharing website.
Detailed Content:	Observation of user`s communication, user tracking, and web analytic techniques and are widely applied in the Internet. These technical possibilities and the transfer of numerous interactions (mail, shopping, information access, business communication) from the offline-world to the Internet cause risks for the individual user and also for the society. Students understand the tracking and observation techniques by having a look on the source code of the web applications and will be able to extend analytics to a wider range of web sites. The collected data is available through a web page and the students are allowed to track their own and other users activity. Several countermeasures can be applied, ranging from browser-based anti-analytics techniques to web access through MIX cascades that encrypt and anonymize all messages (e.g. the TOR network). We introduce the TOR proxy and the TOR browser that allows web access through an anonymization overlay network. The tutorial finishes with a view on the data that is collected without and with anti-analytics techniques.
Media Used:	Practical Demonstrations, Lab Exercises by the students
Assigned Lectures:	- Privacy and Anonymity in the Internet - Mobile Computing and Security Testing - Software Reliability