Research and Teaching in Privacy and Security

Key Research Focus Areas
1. Exploring threats to privacy
2. Increasing the users’ awareness of these threats
3. Developing countermeasures to preserve user privacy
4. Understanding the factors that motivate users to reveal sensitive information
5. Empowering users to protect their privacy by providing innovative and usable methods

Social Media
- Predict user sharing preferences based on dynamic interpersonal relationships and content sensitivity analysis

Smart Metering
- Averting privacy risks by applying local data preprocessing on appliance-level power consumption traces

Crowdsensing and Internet of Things
- Explore new privacy threats resulting from the introduction of smart devices
- Make privacy risks transparent to the users and enable informed decisions about privacy settings
- Develop privacy-preserving mechanisms adapted to resource-constrained devices

Genomic Testing
- Increase users’ awareness about privacy risks related to personal genomic testing
- Provide novel solutions to protect users’ privacy

Planned Teaching Activities
- Lecture on IT-Security and Privacy (B.Sc. level)
- Lecture on Privacy-Enhancing Technologies
- Lecture on Usable Privacy and Security
- Lab on Privacy and Security
- Seminar on Privacy and Security