BA/MA: In-depth Investigation on Privacy Concerns with Smartphone Sensing

Smartphones accompany users during their everyday life. Their sensing capabilities thereby allow the device to be conscious on the user's current situation, activity, or even mental state. Such data can be used to fuel research projects in a.o. psychology[1], or to create intelligent interfaces that adapt to the user's situation and needs.

The used data is very privacy sensitive and can contain lots of personal information. Users are thus often skeptical regarding the adoption of such apps, for example mobile sensing research studies face rather low participation rates. However little is known about the underlying reasons, thoughts, and assumptions that users make. Also it is not clear how much users actually understand about what happens to their data, and how much this lack of knowledge fosters skepticism or – the other way round – leads to a false feeling of security.

The aim of this thesis is to find out more about users specific privacy concerns. To become aware of the current state of research you will first start with a literature research on studies about smartphone (sensing) privacy concerns. Thereby having pointed out gaps in the existing research, you will interview users to find out more about their privacy concerns, thought models, and desires. The results of your thesis should help understand what users are currently struggling with and are concerned about privacy-wise. A thought model relating concerns, reasons, and fears should be created. Finally, privacy issues should be mapped to solution ideas resp. wishes and desires, that from the users perspectives would mitigate their concerns.

A thesis consists of…

- A comprehensive literature research in your domain of research. Your concept and design decisions have to be based on related work where possible. You have to work out a research gap that your project fits into, to avoid reinventing the wheel.
- Coming up with an approach on how you plan to tackle your research question, including steps and timeplan
- Writing up your project in a thesis document
- Present your project in the disputation seminar

You are a good fit for this topic if you…

- Are willing to dig deep into literature research to compile the current state and gap of research
- Like to interview users and dynamically dig deeper into their mentions and opinions, rather than just executing a fixed survey protocol
- Have good writing skills e.g. from Proseminar
- Have a creative and proactive mindset to come up with ideas and approaches to tackle problems
- Are in your fifth (or higher) semester of your Bachelor studies resp. 3rd or higher semester of your Masters in media informatics, or a related field
- You are the project leader of your thesis. This requires an active working style and self-management, including making decisions to stay on track towards meeting your thesis' goal.

If you are interested, please drop me a message including some information why you feel you are a good fit for this topic and a transcript of records to florian.bemmann@ifi.lmu.de !

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[1] Stachl et al. 2019. Predicting personality from patterns of behavior collected with smartphones