

Graduiertenkolloquium Angewandte Informatik

Design and Application of Quantified Self Approaches to Support Reflective Learning

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Reflective learning means returning to and evaluating past personal experiences and work performance in order to promote continuous learning and improve behaviour. This form of informal learning is driven by theories that are evolving since the 19th century and traditional pen and paper diaries are usually the only considered tools. Therefore, they do not rely on the technical advances done in the recent years, especially regarding mobile and ubiquitous technologies.

On the pragmatic side, the cheap availability of sensor-enabled devices gave rise to the Quantified Self movement. Quantified Self (QS) is a collaboration of users and tool makers who share an interest in self-knowledge through self-tracking. This interest results in a variety of tools to collect personally relevant information with the purpose of gaining self-knowledge about one's behaviours, habits and thoughts. Hence, QS approaches offer a rich source of data and new interfaces for quantification of abstract measures (e.g. emotions) that have not been available for learning processes before. However, these are rather experimental approaches and currently there is no unifying framework that clusters and connects these many emergent tools with the goals and benefits of their use.

In this presentation we show how these two strands are brought together and how new mobile and web self-tracking applications inspired by QS approaches can support reflective learning processes.

From a theoretical perspective, the Integrated Model of Reflective Learning and Quantified Self served as basis for this research by categorising and defining which dimensions can be supported by QS applications. We explored three different use cases for each of which a prototype was iteratively designed, implemented and evaluated. These use cases encompass i) mood tracking in the telecommunications sector, ii) mood tracking in trading, iii) and capturing of feedback in lectures and professional presentations. The results of the conducted design studies and evaluations lead to the validation of the defined theoretical model and overall approach.

Termin: Freitag, 07. November 2014, 14.00 Uhr

Ort: Englerstraße 11, 76131 Karlsruhe
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(Hinweise für Besucher: www.aifb.kit.edu/web/Kontakt)

Veranstalter: Institut AIFB, Forschungsgruppe Wissensmanagement

Zu diesem Vortrag lädt das Institut für Angewandte Informatik und Formale Beschreibungsverfahren alle Interessierten herzlich ein.

Andreas Oberweis, Hartmut Schmeck, Detlef Seese, Wolffried Stucky, Rudi Studer (Org.)