



# Ubiquitous Media Technologies

Prof. Dr. Antonio Krüger



## Bachelor/Master-Thesis

### Recommender Systems in Retail Environments

With the rise of the Internet retail has partly moved from classical stores to 24/7 web shops. During the last decade, a large share of the overall turnover was made online. The Internet has brought new possibilities for customers and retailers, e.g. online customers have the possibility to virtually rehearse products like mobile phones and easily compare different models. In particular recommender systems play a major role. By taking into account data from various sources we are able to support customers during the decision making process, for instance by product comparison and recommender systems based on user-generated reviews and comments as well as ratings.

In the era of Ubiquitous Computing the “online” world and the real world are becoming more and more intertwined. The topic of this thesis is on transferring approaches for recommender systems that have been developed for online shops to offline shops by means of ubiquitous computing technologies.

Interesting research questions are: What are means for tracking implicit feedback on item relevance and how can we gain feedback on the user’s interest? Which recommender algorithms can be used based on this data? How can we embed product recommendations into the environment (e.g. digital price labels)?

**Required skills:** Strong programming skills, interface design, and an interest in conducting user studies.

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