

One of the most developing research fields of information retrieval are recommender systems. They typically try to recommend a few of the most relevant or most suitable items to users from all the candidates when the number of candidates can be in the order of thousands or millions. However, it turns out that relevance alone is not enough. Therefore, this work focuses on multi-objective recommender systems using the beyond-relevance objectives. The aim of the thesis is to find out new knowledge about this specific type of recommendation, especially in the connection with the field of HCI, i.e. user and computer interaction that has not been explored much so far.

The software output of the work is a web application and a modified recommender system. These two components were used in a user study, where, among other things, we investigated whether users were willing to explicitly set the parameters for a multi-objective recommender system by assigning weights to each of the objectives, compared different variants of metrics for these objectives, mechanisms for assigning weights and different level of detail of texts and visualization of the explanations of the recommendations.

The results of our experiment show that users perceive the benefit of setting weights for objectives to improve recommendations. We also managed to find out that the most suitable mechanism for assigning weights are sliders. The conducted user study also confirms that users prefer a more detailed explanation of recommendations.