

Week 6

Alfred Kobsa, Generic User Modeling Systems, User Modeling and User-Adapted Interaction, v.11 n.1-2, p.49-63, 2001

This reading gave a deep overview of many different types of user modeling systems from the 1970s to the present. The problem with the paper is that it assumes the reader has a deep knowledge of the underpinnings of user modeling (and given its journal, User Modeling and User-Adapted Interaction, this assumption would be valid); but I would venture to guess that most of us in the class do not have this knowledge.

I want to know why I should care about user modeling. Why should I go to the work of putting it in my application? What does user modeling give me that a well thought-out user interface does not? The paper seems to assume that everybody agrees user modeling is necessary. Yet while there are some examples of good user modeling out there (Amazon's current system comes to mind), there have also been mass-media reports of user modeling gone bad (for example, I remember a recent article about a guy whose TiVo? thought he was gay simply because he had recorded "guy stuff". This is where user modeling breaks down: when we try and apply simplistic, deterministic methods to non-deterministic data, namely human behaviour.

The paper also described some example user modeling systems that, probably because of technical reasons, make assumptions that are quite wrong. For example, in one system, "contradictions between assumptions are sought and various resolution strategies applied ('truth maintenance')." Such removal of contradictions, however, removes what makes us human. Maybe one day I'm interested in NBA scores, the next in spring fashion lines for men. How would the system respond to these seemingly contradictory facts? Which one would it choose to remove? Removal of either fact removes a vital fact of my personality.

Finally, the paper makes light the problem of privacy, giving it only one paragraph in the entire fourteen page paper. Let's say we have a system that has an accurate user model of me. What happens when someone intercepts this model? Or if someone changes it without my knowledge? How do I fix it if it's wrong? Or if someone breaks into the server and steals it? Does that mean my personality is also stolen? These problems are quite difficult and cannot be solved (entirely) through technology.