

## Faculty of Computer Science 2006–2007 Seminar Series

User Preference Elicitation for Automated Negotiation

Ву

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With the wealth of purchase opportunities that exist on the Internet today, coupled with steady increases in available computing power, automated negotiation of purchase transactions via autonomous software agents is becoming more and more common. Before an agent can effectively negotiate agreements on behalf of a user, an accurate model of the user's preferences over possible outcomes must be developed. Preference elicitation is a mechanism for developing such a model. The selection of queries that will provide maximum information regarding a user's preferences is a key component of effective preference elicitation. We discuss a technique for selecting a candidate set of queries to pose to the user. Our approach makes use of a graphical model of the user's preferences, and finds a set of queries whose answers reveal a significant amount of information about the user's preferences. Furthermore, this set of queries is chosen so that the response to one query does not resolve any other queries in the set, thus eliminating the need to recompute a new candidate set each time.

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