Hamilton Institute

**Adaptive Information Access and the Quest for the
Personalization-Privacy Sweetspot***

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Abstract

Conservative estimates of the Web's current size refer to its 10 billion documents and a growth rate that tops 60 terabytes of new information per day. In 2000 the entire World-Wide Web consisted of just 21 terabytes of information, now it grows by 3 times this every single day. This phenomenal growth frames the information overload problem that is threatening to stall the information revolution going forward. In short, users are finding it increasingly difficult to locate the right information at the right time in the right way. Search engine technologies are struggling to cope with the sheer quantity of information that is available, a problem that is greatly exacerbated by the apparent inability of Web users to formulate effective search queries that accurately reflect their current information needs. At the same time it is now possible to gain access to content via a range of new devices including mobile phones and PDAs, which presents a new set of problems because of limited screen-sizes and restricted input capabilities.

This talk will focus on how so-called personalization techniques are being used in response to the information overload problem. Personalization research brings together ideas from artificial intelligence, user profiling, information retrieval and user-interface design to provide users with more proactive and intelligent information services that are capable of predicting the needs of individuals and adapting to their implicit preferences. We will describe how personalization techniques have been successfully applied to the two dominant modes of information access, *browsing* and *search*, with reference to deployed applications in the mobile Internet and Web search arenas. Particular attention will be paid to the natural tension that exists between the potential value of personalization, on the one hand, and the perceived privacy risk associated with profiling, on the other. We will highlight certain recent approaches to personalization that appear to achieve a useful balance between personalization and privacy and argue that realizing this *personalization-privacy sweetspot* may be the key to the large-scale success of personalization technologies in the future.

Venue: Seminar Room, Hamilton Institute, Rye Hall,
NUI Maynooth

Time: 1.00 - 2.00pm (followed by tea/coffee)

Travel directions are available at www.hamilton.ie

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