Theory and Practice of Needles and Haystacks:
Stories from the InfoLab

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SEMINAR: MEET THE EECS FACULTY
. Ford Design Center, ITW Auditorium

(Go to Tech 2nd floor, take bridge south to Ford, go down one floor.
From Ford main entrance, go up one floor)

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The problem with the computer is that it only does what you tell it to do, not what you want it to do. But few of us can actually describe what we want at the level of detail required to communicate with the machine. As a result, our interactions with the machine seem like conversations with an idiot savant. So, while the primary role of the machine in our lives is communication, there exists a huge gap between our wants and the machine's ability to understand.

Bridging this gap is the mission of the InfoLab.

Building systems that track the context of a user's activities, both on line and off, and then use that context to figure out and retrieve what they need, the InfoLab is dedicated to creating a man/machine dynamic in which the machine itself vanishes and is replaced by a helper and trusted aide.

In this talk, I'll outline the problems people have with getting to information and describe some of the InfoLab systems that help them. We'll look at a range of systems that capture user contexts as people edit and browse online, check books out of the library, and even watch TV. We'll then look at how these systems use this information to provide relevant services to people no matter where they are, what they're doing or what they are thinking.

In 1998, Professor Hammond and his students moved to Northwestern University's Computer Science Department to form the Intelligent Information Laboratory (InfoLab). At the InfoLab, students and faculty work closely creating technology that bridges the gap between people and the information they need. The InfoLab has focused on frictionless information systems that make use of a wide variety of user contexts to support and radically transform user experiences in the areas of information retrieval, media delivery, speech recognition, collaborative environments, news gathering, intelligent browsing and personalized recommendation. Many of his technologies have been deployed, including one currently on display at Chicago's Second City. Watson, now being productized by Intellext, Inc. is the first of the InfoLab systems to be fully commercialized.