voice interface design

course epitome

voice interfaces are an emergent—and, I expect, shortly-to-be-dominant—technology for interacting with databases. Such things, in very primitive and highly annoying fashion, exist now. They are the automated telephone menus that you have to navigate endlessly when you phone almost any company these days, and the supercilious bell telephone systems that start out, “for service in English, say ‘English’. Pour service en français, dit ‘Français’.” Currently the available databases are limited to phone books and financial records and the like; soon, they will be vast networks of information (e.g., big honking websites). The technology is at hand to get rid of the menus, along with most of the annoyances, and just talk to automated agents. In natural, conversational, English, not only about the name of the VP of corporate relations or what your bank balance is, but about the hockey scores, the latest movies, the best price for digital cameras, and they’ll know.

That’s sort of like saying, in 1981, that the technology is at hand to just point at objects on a screen with a hand-controlled arrow, click a button, and the rest is magic. Well, the magic required heavy design efforts, as a decade of market-failure demonstrated, and 20 years later we still have to battle with crappy graphic interfaces (as well using happily the non-crappy ones). Interface design is not easy. Working with voice input-and-output alone will not make it any easier. The interactions will have to be scripted, strategies will have to be developed, lessons will have to be learned.

This course is a seminar in designing, scripting, strategizing, developing, and learning this new style of interface.

course limit and prerequisite

There will only be ten students admitted to the seminar, by permission of the professor.

meeting times

We will meet once a week as a group, to discuss the readings, plan the assignments, and shoot the breeze. When we meet will be worked out on the basis of everyone’s availability. The rest of the time we will meet virtually, via a list server, at all hours.

required texts

Balentine and Morgan, how to build a speech recognition application.
Hutchby and Wooffitt, conversation analysis: principles, practices and applications

There may be other readings as well; subject to certain eventualities, like corporate amenability and non-disclosure agreements, some technical reports may be included in the readings.

formal requirements

voice-interface design for a website 50%
course participation 50%

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