The Future of Entertainment

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Gesture-Based Remote Control

Soon you'll be able to simply point at your television and control it with hand gestures. Soon you'll be able to simply point at your television and control it with hand gestures. We love our mice, really we do. Sometimes, however, such as when we're sitting on the couch watching a DVD on a laptop, or when we're working across the room from an MP3-playing PC, it just isn't convenient to drag a hockey puck and click on what we want. Attempts to replace the venerable mouse--whether with voice recognition or brain-wave scanners--have invariably failed. But an alternative is emerging.

What is it?

Compared with the intricacies of voice recognition, gesture recognition is a fairly simple idea that is only now making its way into consumer electronics. The idea is to employ a camera (such as a laptop's Webcam) to watch the user and react to the person's hand signals. Holding your palm out flat would indicate "stop," for example, if you're playing a movie or a song. And waving a fist around in the air could double as a pointing system: You would just move your fist to the right to move the pointer right, and so on.

Gestures are a major form of human communication. Hence gestures are found to be an appealing way to interact with computers, as they are already a natural part of how we communicate. A primary goal of gesture recognition is to create a system which can identify specific human gestures and use them to convey information for device control and by implementing real time gesture recognition a user can control a computer by doing a specific gesture in front of a video camera linked to the computer.

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When is it coming?

Gesture recognition systems are creeping onto the market now. Toshiba, a pioneer in this market, has at least one product out that supports an early version of the technology: the Qosmio G55 laptop, which can recognize gestures to control multimedia playback. The company is also experimenting with a TV version of the technology, which would watch for hand signals via a small camera atop the set. Based on my tests, though, the accuracy of these systems still needs a lot of work.

Gesture recognition is a neat way to pause the DVD on your laptop, but it probably remains a way off from being sophisticated enough for broad adoption. All the same, its successful development would excite tons of interest from the "can't find the remote" crowd. Expect to see gesture recognition technology make some great strides over the next few years, with inroads into mainstream markets by 2012.