

Leap jumps to capture next step in motion control

March 12 2013, by Barbara Ortutay

In a bustling tent set up in a parking lot here at the South By Southwest Interactive Festival, people are pointing their hands and gesturing with chopsticks as they guide various actions on a dozen computer screens.

Some of the sharpest minds in technology have gathered in Austin, Texas, to ponder the ever-connected nature of the modern world. A big theme this year focuses on how to create more seamless interactions between people and technology, finding ways to control devices that go beyond mice, trackpads and [touchscreens](#).

That's where the [Leap Motion a computer controller comes in](#). It's the gadget's first public appearance. On display are popular games such as the fruit-chopping "Fruit Ninja," and a more challenging one involving a maze. One man paints a picture by moving his fingers a few inches from a [computer screen](#).

Greg Dziem, who works in data management in Austin, is using the controller to play the maze game. "It's pretty sensitive," he says. "You have to go slow. You have to be calm, steady."

The best-known [motion controller](#) to date has been [Microsoft Corp.](#)'s Kinect, which is used primarily for video games. People stand at least six feet from the device, which is usually mounted on or near a TV set. Cameras in the Kinect track users' movements and transmit them to the computer. But while Kinect is meant for living rooms and dancing games, Leap Motion is designed for people to use while seated and

moving their hands just a few inches from the screens of laptops and personal computers.

"The technology was born out of the deep frustration of interacting with computers," says CEO and co-founder Michael Buckwald. While computers are "vastly different" than they were 30 years ago, he says, the way people interact with them hasn't really evolved.

Leap hopes to change that, allowing people to use natural hand movements to control games, complete office tasks, paint, create 3-D objects, and edit music and video. Leap's creators don't like to use the word "gesture" because that implies a set of pre-determined hand movements to control the screen. Instead, they like to think of their technology as more seamless than that.

Buckwald talks about the barrier that exists between computers and their users and says the best way to get rid of it is to harness "people's natural ability to interact" with the machine.

"Every day we reach out and grab things," he says. "It's very natural, but very complicated. We want people to reach into the computer."

Using Leap may take a little getting used to, if only because people who are accustomed to touchscreens may be tempted to poke at the monitor instead of sweeping and flicking their hands a few inches away from it.

In a demonstration, Leap's vice president of product marketing, Michael Zagorsek, showed off a yet-to-be named photo application that lets people browse through the photos on their computer using Leap. In another app, users can strum on-screen strings to make music. A demo-only program designed to show Leap's properties lets users mold a piece of virtual clay using their hands and a chopstick. There was no noticeable lag between the off-screen action and the on-screen

movement.

The device itself is a bit longer and narrower than a matchbox. It works using three infrared LED lights and two cameras to track users' hands. It plugs into a PC or a Mac and sits between the user and the keyboard.

The controllers will cost \$80 and will be sold in Best Buy stores beginning on May 19. Leap will have an app store, called Airspace, with free and paid apps available in areas that range from gaming to 3-D modeling to travel to business and finance.

More information: www.leapmotion.com

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