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You, Too, Can Soon Be Like Tom Cruise in ‘Minority Report’

By [JENNIFER 8. LEE](#)

TED/James Duncan Davidson John Underkoffler, who helped create the gesture-based computer interface imagined in the film “Minority Report,” has brought that technology to real life. He gave a demonstration at the TED Conference in Long Beach, Calif., on Friday.

Hollywood imitates life. And sometimes life imitates Hollywood.

[John Underkoffler](#), who led the team that came up with the interface that Tom Cruise’s character used in the 2002 movie “Minority Report,” co-founded a company, [Oblong Industries](#), to make the gesture-activated interface a reality.

Using special gloves, Mr. Underkoffler demonstrated the interface — called the g-speak Spatial Operating Environment — on Friday at the annual TED conference in Long Beach, Calif., a series of lectures by experts across a variety of technologies.

He pushed, pulled and twisted vast troves of photos and forms that were on a screen in front of him, compressing and stretching as he went. He zoomed in, zoomed out and rotated the images using six degrees of control. In one part of the demonstration, he reached into a series of movies, plucked out a single character from each and placed them onto a “table” together where they continued to move. (Oblong has released its [own demonstration video](#)).

In this conception of computing, the input and the output occupy the same space — unlike a conventional computer, in which the mouse and computer keyboard are separate from the screen, where the changes appear. Even the Nintendo Wii game console, which responds to gesture and motions, often projects that motion onto an on-screen figure.

Mr. Underkoffler said this gesture technology was already being used in Fortune 50 companies, government agencies and universities, and he predicted that it would soon be available for consumers. “I think in five years’ time, when you buy a computer, you’ll get this,” he said.

In fact, consumers will get the first taste of gesture-based interfaces later this year. As The Times [reported last month](#), [Microsoft](#), [Hitachi](#) and PC makers are on the brink of rolling out game consoles, televisions and computers that use gestures to control the machines.

Gesture-based interfaces are among the most significant advances in computer interface design since the mid-1980s, and they are part of a trend of [accelerating advances in how humans interact with computers](#).

Oblong officially came out of stealth mode in November 2008, but Mr. Underkoffler said the TED demonstration was the public “coming out” of the company’s technology. Oblong, which is based in Los Angeles, now has around 25 employees.

The old model of “one human, one machine, one mouse, one screen” is passe, said Mr. Underkoffler, who spent 15 years at the MIT Media Lab before co-founding Oblong.

Mr. Underkoffler was working at the MIT Media Lab when [Alex McDowell, the production director for “Minority Report,”](#) visited in search for ideas for a fictional world set five decades into the future. Mr. Underkoffler was hired to be a science consultant for the film, with a particular emphasis on a computer interface that would be used in some key scenes.

In developing the vocabulary of motions and gestures for the actors, he deepened his understanding of how humans interacted with the technology. In filming, the actors were mostly miming and the images of projected data were added later, making the entire situation seem real.

The experience sharpened Mr. Underkoffler’s desire to make the technology into something commercially viable.