G-Speak will make the keyboard and mouse obsolete (w/ Video)

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(PhysOrg.com) -- The mouse may soon become obsolete, with interfaces that interpret gestures rapidly approaching a stage at which they can be released for general consumers.

A new system being developed by Oblong Industries harnesses gesture technology that uses special surfaces and displays that can track hand movements, providing the operator is wearing the special conducting gloves. The system works with images and videos, and has been dubbed the "G-Speak" spatial operating environment (SOE).

In a G-Speak environment everything on screen can be directly manipulated by gestures such as pointing, and the system simplifies the

control of real-world objects such as robots or vehicles, and allows physical tools and interfaces to be used as input devices.

John Underkoffler, co-founder of Oblong Industries, says G-Speak should be available for consumers within five years, and its combination of interpretation of gestures, real-world pixels and recombinant networking represents the biggest step forward in computer interfaces since 1984.

Underkoffler says applications for the new interface technology include the operation of 3-D interfaces, processing of large data sets, integration of multiple computers and large screens into building-scale work environments. G-speak networking's collection of library components allows applications to scale dynamically and transparently across multiple computers, and in a LAN network this makes more effective use of CPU power and provides support for applications enabling collaborative work over the network. It will also be possible to add new people and computers to the network, and to add new code at run-time.

G-speak controls applications through hand poses, pointing, and hand movements, with input from several hands simultaneously being fully supported. Hand and finger motions are tracked to an accuracy of 0.1 mm at 100 Hz.

Using gestural I/Os is much more efficient at complex navigation tasks and selection/sorting, than the mouse and keyboard, but both will still be available for use when appropriate.

G-Speak is already in use by Fortune 50 companies, and by some universities and government agencies, and a software development kit running on Linux and Mac is already available.

More information:

-- Oblong.com - oblong.com/article/086E19gPvDcktAf9.html

-- More videos: vimeo.com/user922585/videos

-- Another video on YouTube:

www.youtube.com/watch?v=KqyHM29VNqM

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