VirtualHand® Software Development Kit

The VirtualHand Software Development Kit (SDK) is a powerful development solution for hand enabling 3D software applications. Users can easily add graphical hand motion, hand-interaction, and force feedback to their simulation applications.

Hand Enable Your Software

The VirtualHand SDK integrates seamlessly with CyberGlove Systems family of hardware productions, making it easy for developers of visualization, CAD, and simulation applications to take full advantage of CyberGlove Systems’ revolutionary advancements in whole-hand interface technology.

Users of hand-enabled applications can wear a CyberGlove, CyberTouch, CyberGrasp, and CyberForce products to handle, and even feel three-dimensional digital objects. They can experience realistic force feedback using CyberGlove Systems’ Touch Sense technology. And they can do it all through the most natural interface — the human hand.

Features

The VirtualHand SDK consists of a Device Manager, a Device Configuration Utility, and the VirtualHand API. Its features include:

- A general framework for constructing hand-enabled simulations from scratch, or for integrating hand-interaction into existing applications. Complete hand management classes for kinematics and manipulation are also included.
- Full network support so a user can run an application on a host computer while receiving data from another machine on the network.
- A user-friendly Device Configuration Utility that lets users calibrate and configure CyberGlove products, along with third-party spatial trackers, in an intuitive and graphical manner.
- An efficient Device Manager that communicates in real time with peripheral devices and runs as a standalone background process.
- Real-time collision-detection capabilities between 3D digital objects, as well as between digital objects and the graphical hand.
- A high-level force feedback API, including effects such as jolts, pulses, and vibrations for CyberGrasp and CyberForce system users.
- An object-oriented architecture with an accompanying C++ library.

System Requirements

- Operating System: Windows 7
- Host Computer Processor: Dual Pentium 2 GHz
- Memory: 2GB RAM
- Graphics: High-end OpenGL graphics
- Other: Requires Visual Studio 2008
- Interface: Ethernet

About CyberGlove Systems LLC

Launched in 1990, the family of CyberGlove products is the established and most sophisticated data glove solution in the marketplace. The product family includes four data-glove solutions and the VirtualHand Software Development Kit (SDK). The products let users capture detailed finger, hand, and arm movement, allowing them to “reach in and manipulate” digital objects in virtual reality.

With CyberGlove products, users can more quickly prototype and animate in virtual reality thereby saving both time and money. Customers include Fortune 500 and Global 500 corporations, government agencies, and universities in the U.S., Europe, Asia, Middle East and South America.

For More Information

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