

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

# VirtualHand® Software Development Kit

### Hand Enable Your Software

The VirtualHand SDK integrates seamlessly with Immersion 3D Interaction's family of hardware products, making it easy for developers of visualization, CAD and simulation applications to take full advantage of Immersion's revolutionary advancements in whole-hand interface technology. Users of hand-enabled applications can wear Immersion's CyberGlove<sup>®</sup>, CyberTouch<sup>™</sup> CyberGrasp<sup>®</sup> and CyberForce<sup>®</sup> products to handle, and even feel three-dimensional digital objects. They can experience realistic force feedback using Immersion's TouchSense<sup>™</sup> 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 Toolkit. Its features include:

- A general framework for constructing handenabled simulations from scratch, or for integrating hand-interaction into existing applications. Complete hand management classes for kinematics and manipulation. Allows developers to concentrate on using the VirtualHand, not making it work.
- 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 Java<sup>™</sup>-based Device Configuration Utility that lets users calibrate and configure Immersion 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 users.
  - An object-oriented architecture with an accompanying C++ library.

Add hand motion, hand interaction and force feedback to 3D software applications.

#### **System Requirements**

Operating System: Windows<sup>®</sup> NT 4.0,<sup>°</sup>
 Windows 2000 or SGI IRIX<sup>®</sup>

(versions 6.4 or 6.5)

- Host Computer: Pentium<sup>®</sup> 400 MHz or SGI Octane<sup>®</sup> R10000 dual processor recommended
- Memory: 128MB RAM
- Graphics: High-end OpenGL graphics
- Other: Windows version requires Visual
  C++ 6.0 or higher. Java<sup>™</sup> is not required
- Interface: Ethernet

#### **About Immersion Corporation**

Founded in 1993, Immersion Corporation develops hardware and software technologies that enable users to interact with computers using their sense of touch.

#### For More Information

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