

MAGIC BOX

James Oliver Ph.D Tyler Streeter
Dylan Spencer Jason Rohe Aaron Meldrum

New Interaction

The Magic Box provides the user a new means of interacting with computers and virtual spaces by allowing one to interact with a virtual world from the inside while observing the effects from the outside.

Construction

The Magic Box is constructed from four LCD screens. A data glove is used for interaction. We use a magnetic tracking system for head and hand positioning and VRjuggler to ensure perspectives are correct.

Using four LCD screens to display an image, the Magic Box tracks the user's vision and hand for precise and intuitive interaction. Vision tracking ensures that, regardless of the user's head orientation, the picture stays perspective correct which maintains the illusion of actual space inside the box. Hand tracking ensures that the user's hand location appears on screen where they expect it to appear.

This material is based upon work supported by the National Science Foundation under Grant No. IIS-0552522. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



Funded by NSF IIS-0552522.