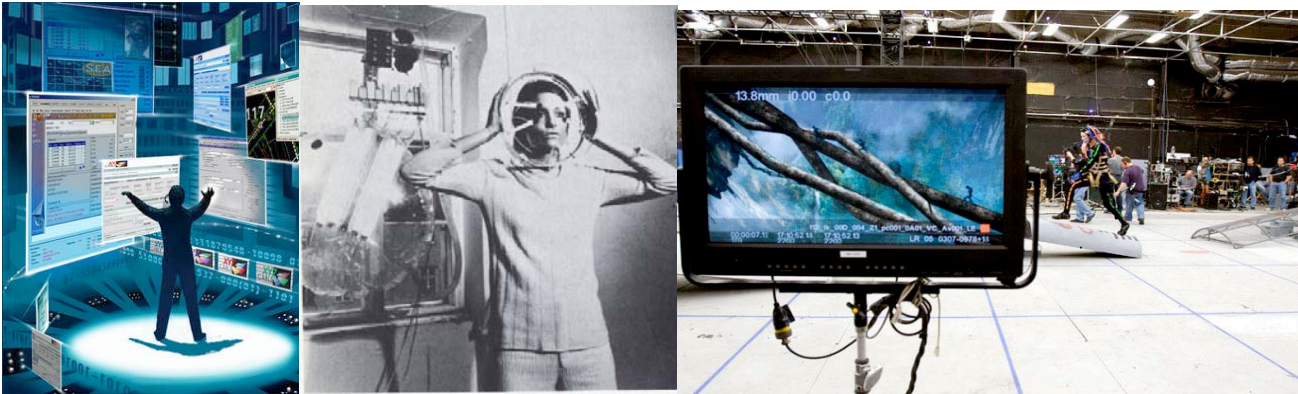
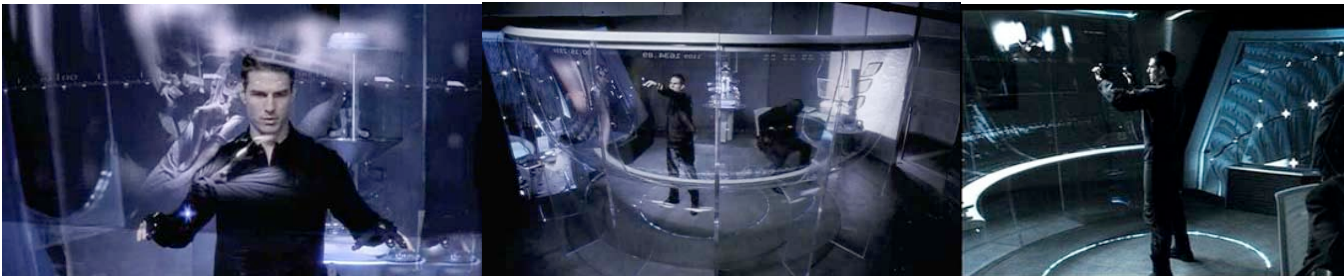


Gustavo Rincon  
Stephen Pope - MAT200C  
Presentation: Movement beyond the table: Camera, Construction, Software and Interaction  
Date: June 8, 2010

Touch: Immersive Concepts:



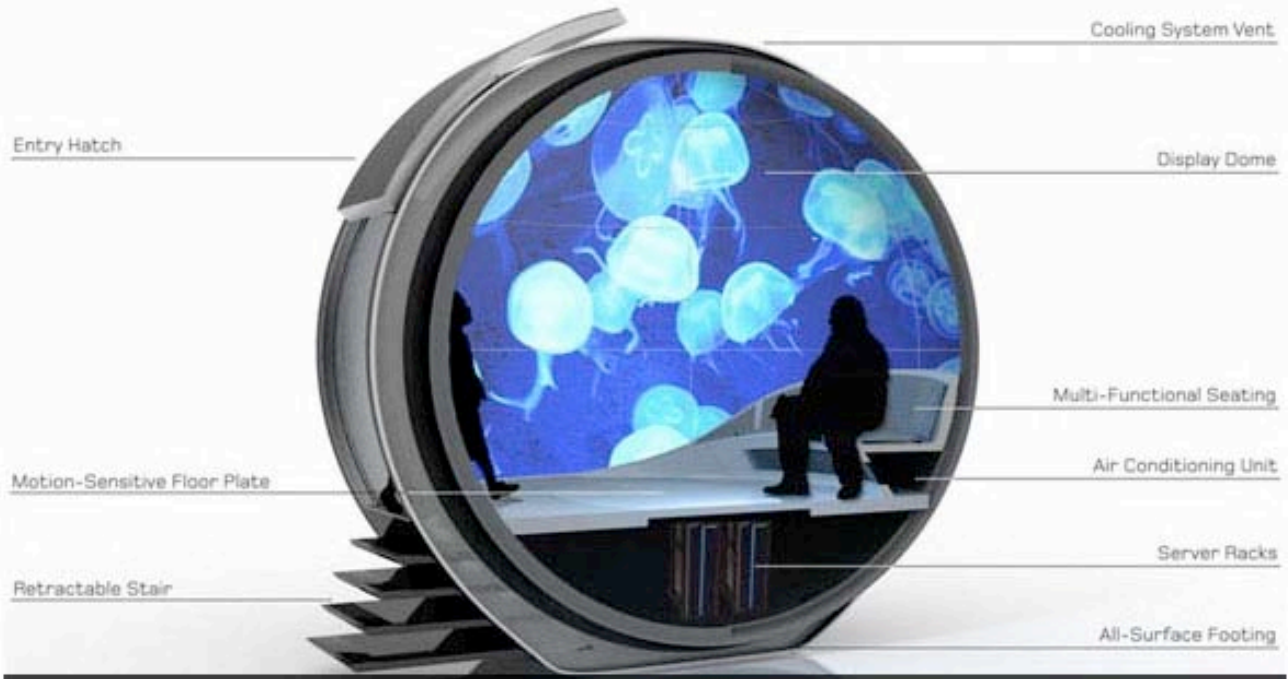
Art & Film



Cinema: Proposed Visualized Technology



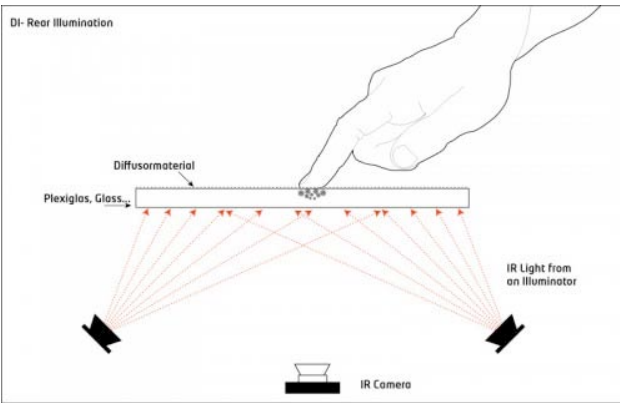
Human Computer Interaction: Types (examples)



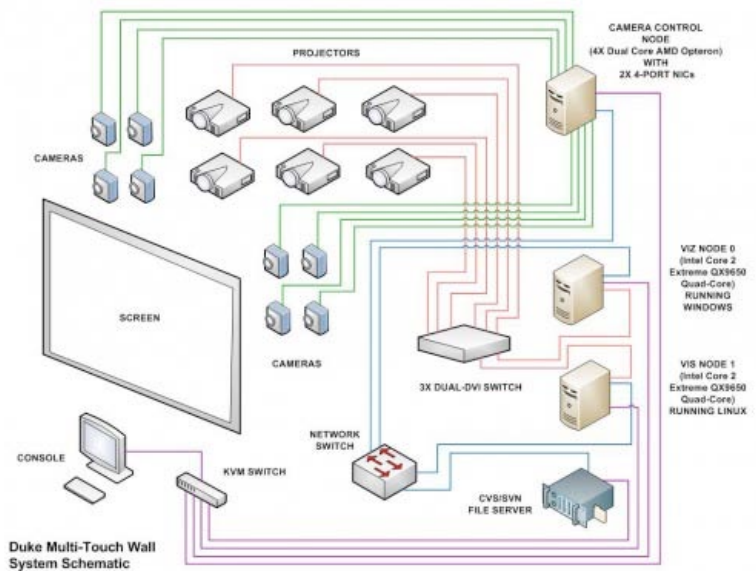
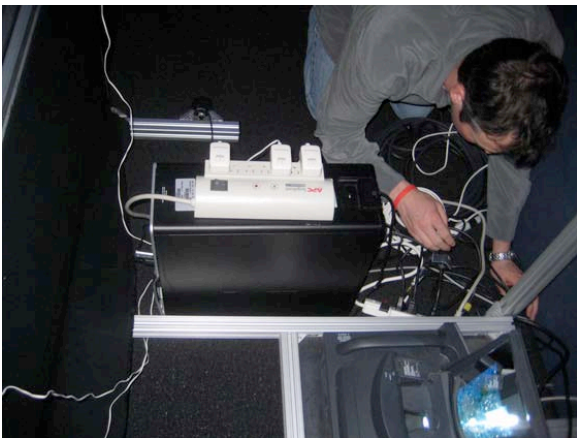
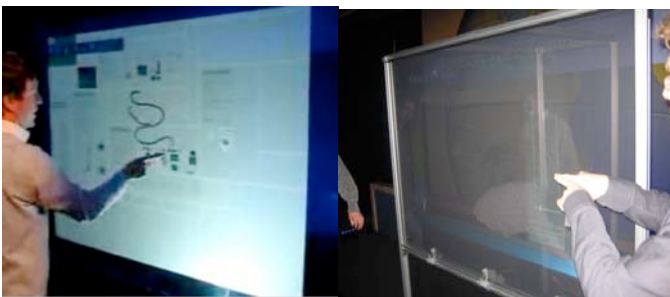
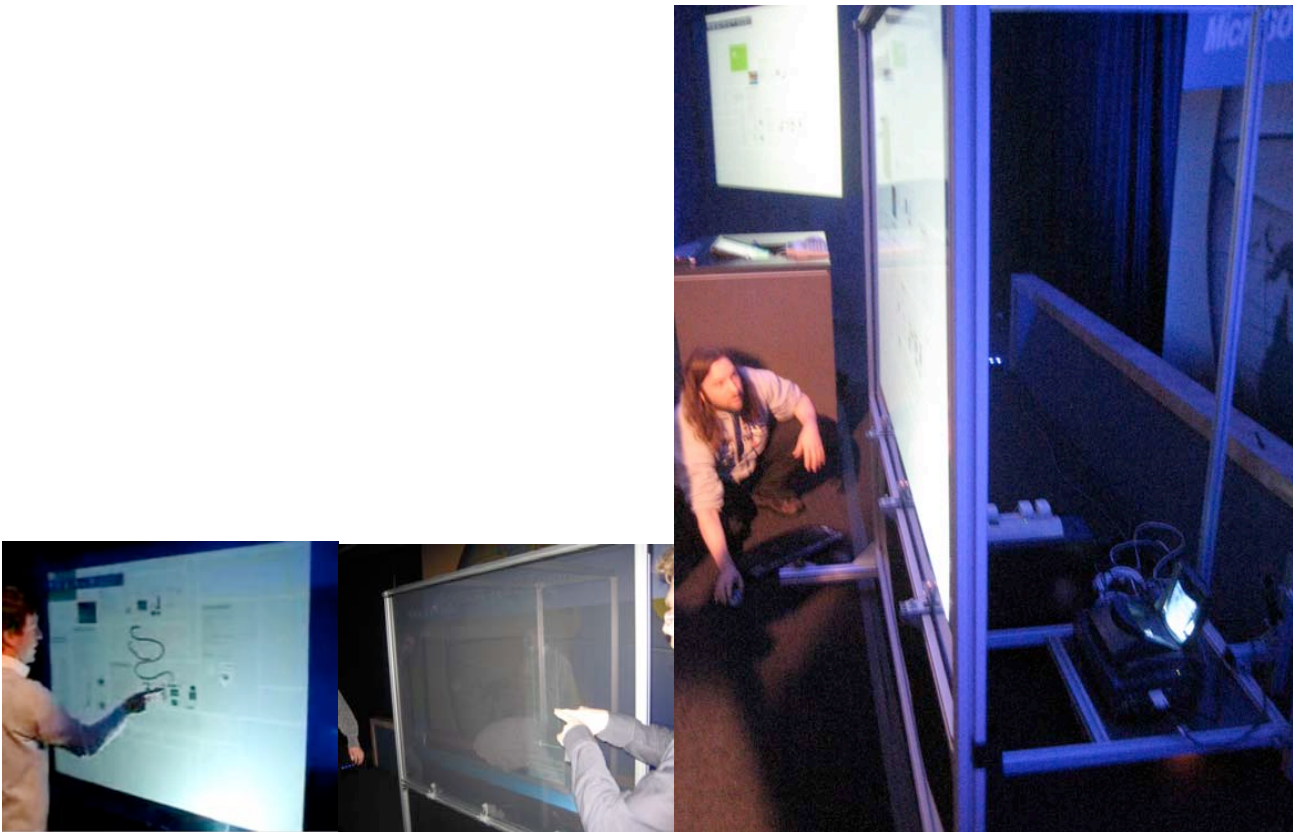
Proposed immersive environment:



Immersive Environments: Current Research



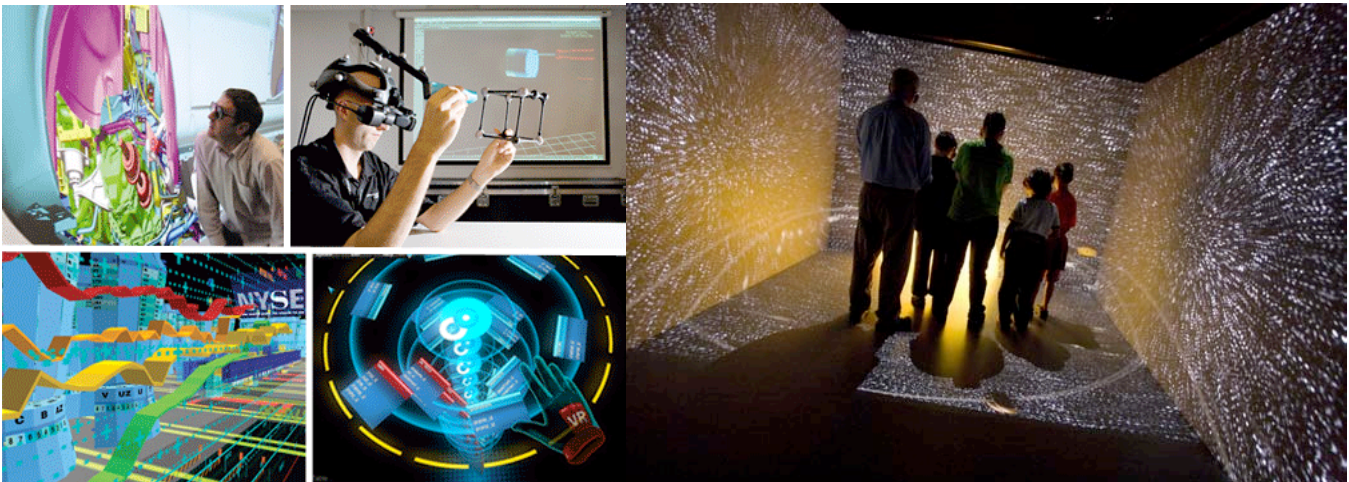
Touch Table



Touch Surface: (Wall)



Multi Touch Hologram: (Screen)



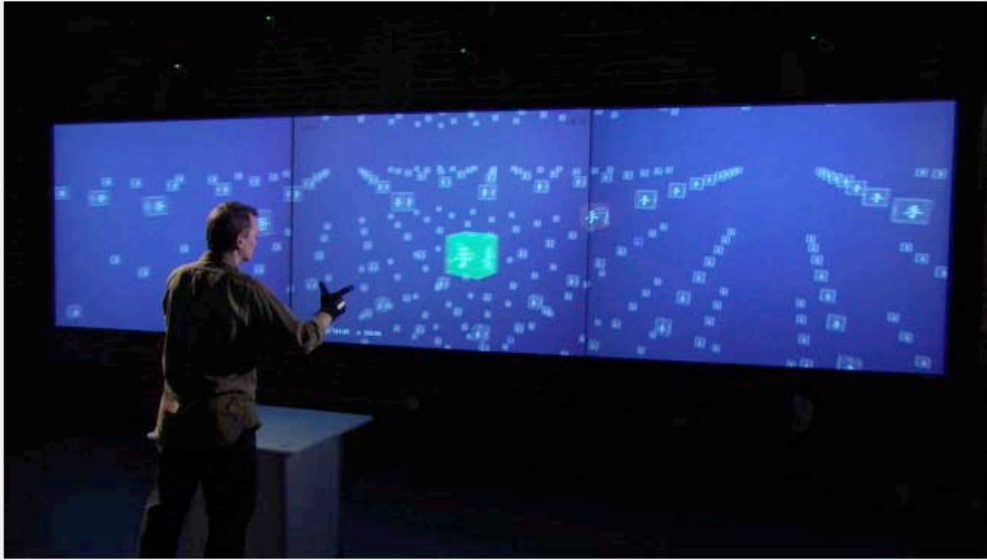
Data Visualization & interaction

## Oblong at altitude: Sundance 2009

<http://oblong.com/>

Resources and Links:

### G Speak Spatial Operating Environment



### Experience CAD via Multitouch interfaces

<http://labs.autodesk.com/technologies/multitouch/>



## Demo Touchtable (Wired Science)

<http://www.pbs.org/kcet/wiredscience/video/231-touchtable.html>

Demo  
Touchable



## Touch Space Augmented Reality Demonstration

<http://video.google.com/videoplay?docid=-1922747073003090226&pl=true#>



### Microsoft's Sphere display in action

<http://blog.seattlepi.com/microsoft/archives/144629.asp>



### Space Invader on Multi Touch Sphere

<http://www.touchuserinterface.com/2009/05/space-invader-on-multi-touch-sphere.html>



## Displax Thin Film turns most flat surfaces into touch screens

[http://www.google.com/imgres?imgurl=http://www.inewidea.com/wp-content/uploads/2009/04/image0142.jpg&imgrefurl=http://www.inewidea.com/tag/multi-touch&usq=\\_\\_5BqP8SoEcEmIhnn5WJwkZ\\_3kS4=&h=248&w=420&sz=49&hl=en&start=32&um=1&itbs=1&tbnid=GNUU8bGtJMqYQM:&tbnh=74&tbnw=125&prev=/images%3Fq%3Dmulti%2Btouch%2Bbuildings%26start%3D18%26um%3D1%26hl%3Den%26client%3Dsafari%26sa%3DN%26rls%3Den%26ndsp%3D18%26tbs%3Disch:1](http://www.google.com/imgres?imgurl=http://www.inewidea.com/wp-content/uploads/2009/04/image0142.jpg&imgrefurl=http://www.inewidea.com/tag/multi-touch&usq=__5BqP8SoEcEmIhnn5WJwkZ_3kS4=&h=248&w=420&sz=49&hl=en&start=32&um=1&itbs=1&tbnid=GNUU8bGtJMqYQM:&tbnh=74&tbnw=125&prev=/images%3Fq%3Dmulti%2Btouch%2Bbuildings%26start%3D18%26um%3D1%26hl%3Den%26client%3Dsafari%26sa%3DN%26rls%3Den%26ndsp%3D18%26tbs%3Disch:1)



## Teliris InterAct TouchTable and Touch Wall: Immersive collaboration & Telepresence

[http://www.google.com/imgres?imgurl=http://www.telepresenceoptions.com/images/teliris\\_interact\\_touchtable2.jpg&imgrefurl=http://interactivemultimediatechnology.blogspot.com/2008/11/teliris-interact-touchtable-and.html&usq=\\_\\_h8TtrIV\\_lj9f4TmVUKMj95qI-4Q=&h=413&w=550&sz=75&hl=en&start=12&um=1&itbs=1&tbnid=1ItKCsxQw5SQRM:&tbnh=100&tbnw=133&prev=/images%3Fq%3Dgroup%2Bvirtual%2Blearning%2Btouch%2Btable%26um%3D1%26hl%3Den%26client%3Dsafari%26sa%3DN%26rls%3Den%26tbs%3Disch:1](http://www.google.com/imgres?imgurl=http://www.telepresenceoptions.com/images/teliris_interact_touchtable2.jpg&imgrefurl=http://interactivemultimediatechnology.blogspot.com/2008/11/teliris-interact-touchtable-and.html&usq=__h8TtrIV_lj9f4TmVUKMj95qI-4Q=&h=413&w=550&sz=75&hl=en&start=12&um=1&itbs=1&tbnid=1ItKCsxQw5SQRM:&tbnh=100&tbnw=133&prev=/images%3Fq%3Dgroup%2Bvirtual%2Blearning%2Btouch%2Btable%26um%3D1%26hl%3Den%26client%3Dsafari%26sa%3DN%26rls%3Den%26tbs%3Disch:1)

### "Touch to Telepresence"



## Touchwall: Microsoft's Inexpensive Wall-Based Multi-Touch Interface

<http://techcrunch.com/2008/05/14/microsoft-touchwall-can-inexpensively-turn-any-flat-surface-into-a-multi-touch-display/>



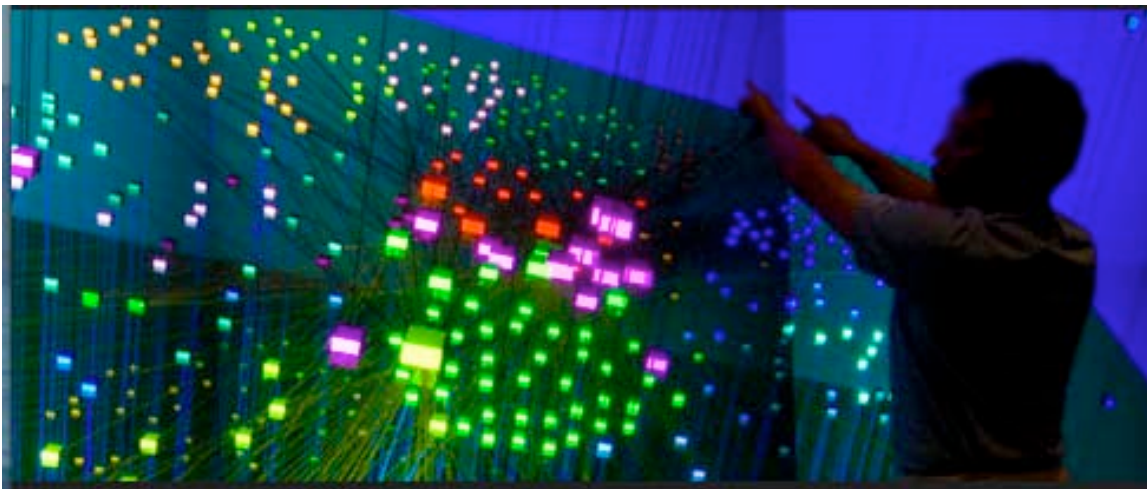
## Seeper - In Progress, Interactive MultiTouch Sphere 2009

[http://www.youtube.com/watch?v=jR3pjz\\_368](http://www.youtube.com/watch?v=jR3pjz_368)



## RENCI Vis Group Multi-Touch Blog

[http://www.google.com/imgres?imgurl=http://vis.renci.org/multitouch/wp-content/uploads/2008/11/mt\\_table\\_1.jpg&imgrefurl=http://vis.renci.org/multitouch/%3Fp%3D164&usq=\\_qLwQMn5TAAA8CnGeyq5PI-nsKc=&h=832&w=846&sz=183&hl=en&start=6&um=1&itbs=1&tbnid=K92yeU2plcX0yM:&tbnh=143&tbnw=145&prev=/images%3Fq%3Dtouch%2Btable%26um%3D1%26hl%3Den%26client%3Dsafari%26sa%3DX%26rls%3Den%26tbs%3Disch:1](http://www.google.com/imgres?imgurl=http://vis.renci.org/multitouch/wp-content/uploads/2008/11/mt_table_1.jpg&imgrefurl=http://vis.renci.org/multitouch/%3Fp%3D164&usq=_qLwQMn5TAAA8CnGeyq5PI-nsKc=&h=832&w=846&sz=183&hl=en&start=6&um=1&itbs=1&tbnid=K92yeU2plcX0yM:&tbnh=143&tbnw=145&prev=/images%3Fq%3Dtouch%2Btable%26um%3D1%26hl%3Den%26client%3Dsafari%26sa%3DX%26rls%3Den%26tbs%3Disch:1)



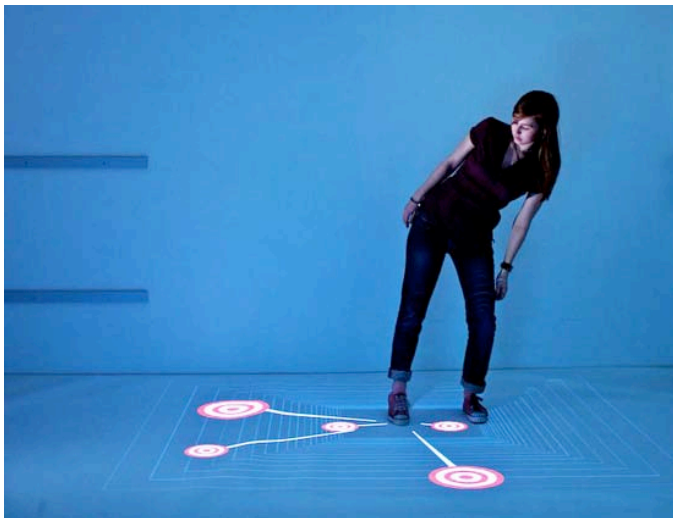
## Artists Exploring Motion Interfaces

<http://userwww.sfsu.edu/~infoarts/links/motion/motartists.htm>



## Photo- floor interactivity

[http://www.instablogsimages.com/images/2010/04/13/multi-touch-floor-display\\_01\\_Jt9br\\_17621.jpg](http://www.instablogsimages.com/images/2010/04/13/multi-touch-floor-display_01_Jt9br_17621.jpg)



## Virtual Reality: Futuristic Tools for Virtual Worlds

<http://weburbanist.com/2010/03/30/virtual-reality-futuristic-tools-for-virtual-worlds/>

[VR Treadmill brings Outdoors Inside](#)

and

<http://www.aboutprojectors.com/news/2008/07/page/2/>



## Motion Capture – Advanced Real time Tracking

<http://www.ar-tracking.de/Motion-Capture.214.0.html>



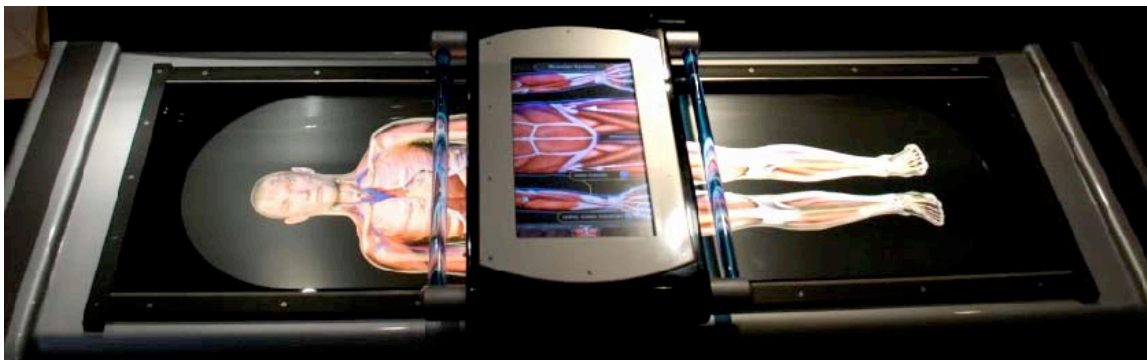
## Interactive Wall - Multi Touch

<http://www.youtube.com/watch?v=SYyIJJ0SrLQ&feature=fvw>



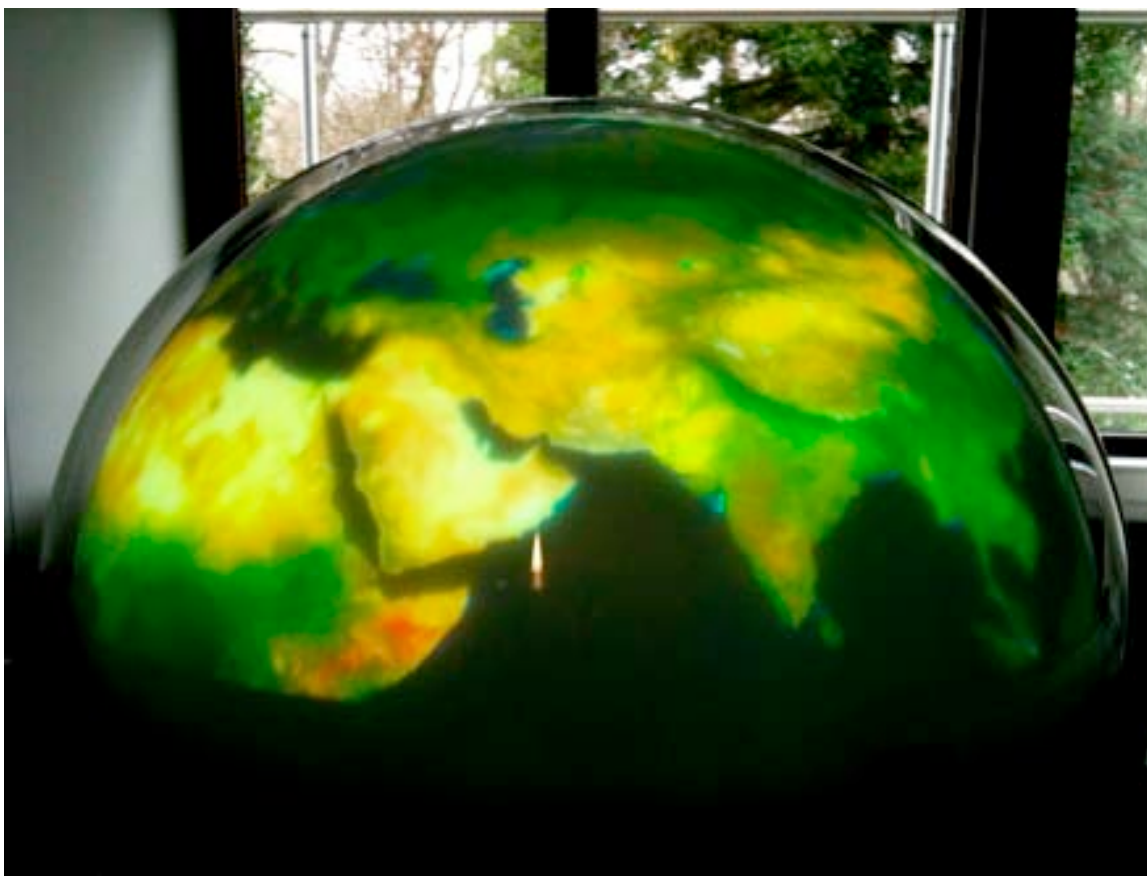
### I-Viewer (IV)

<http://www.exhibitengineering.com/products.htm>



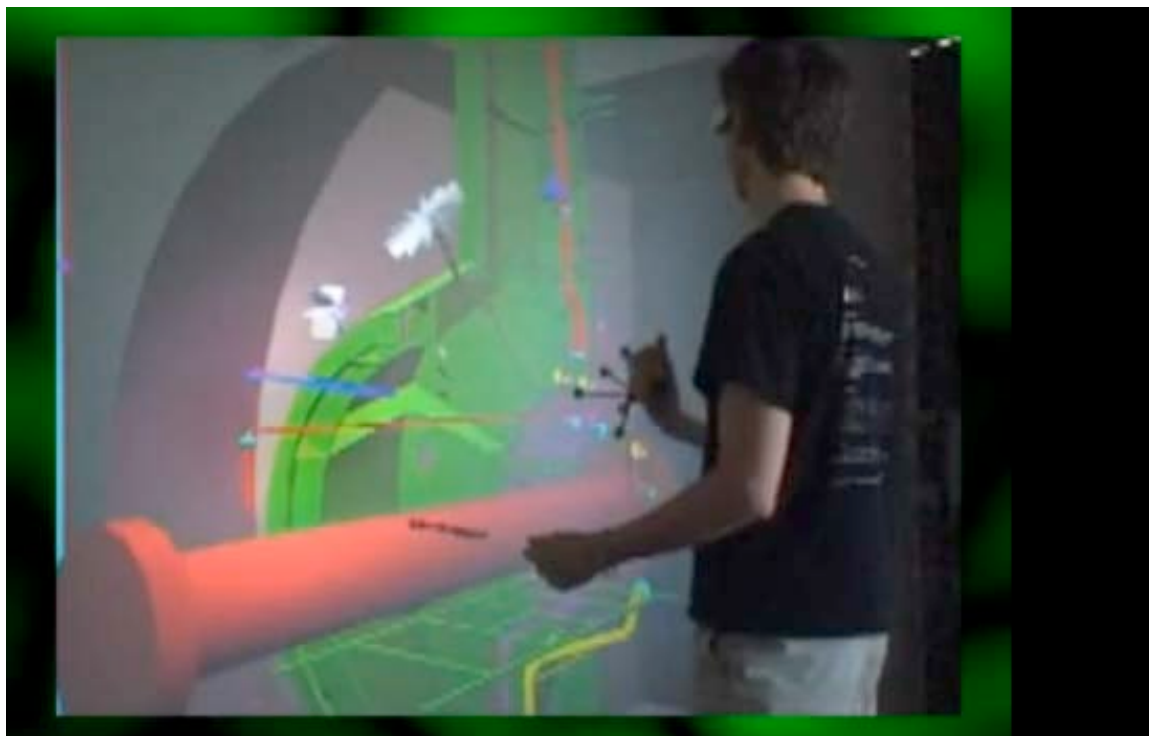
### Northern Hemisphere

<http://www.multitouch360.com/>



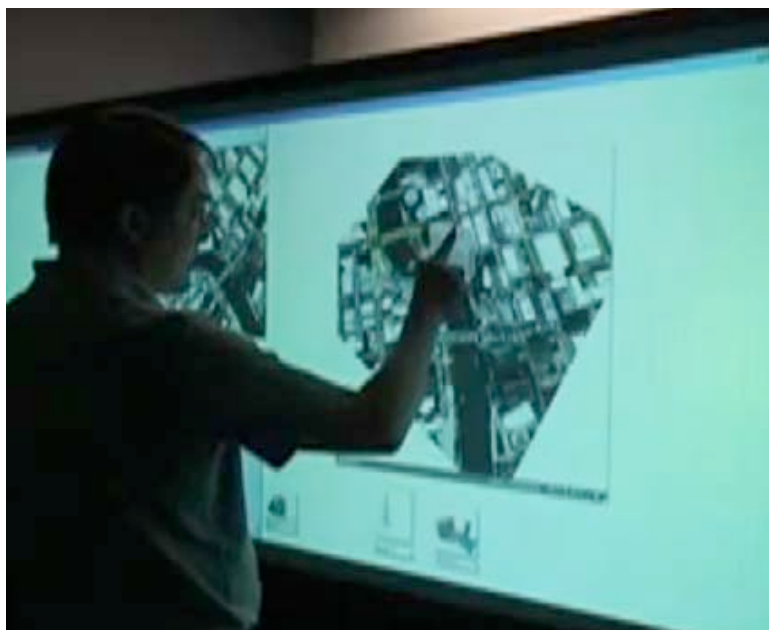
## iotracker Infrared Optical Motion Tracker for Augmented and Virtual Reality

<http://www.youtube.com/watch?v=zBqFHMpvFIM>



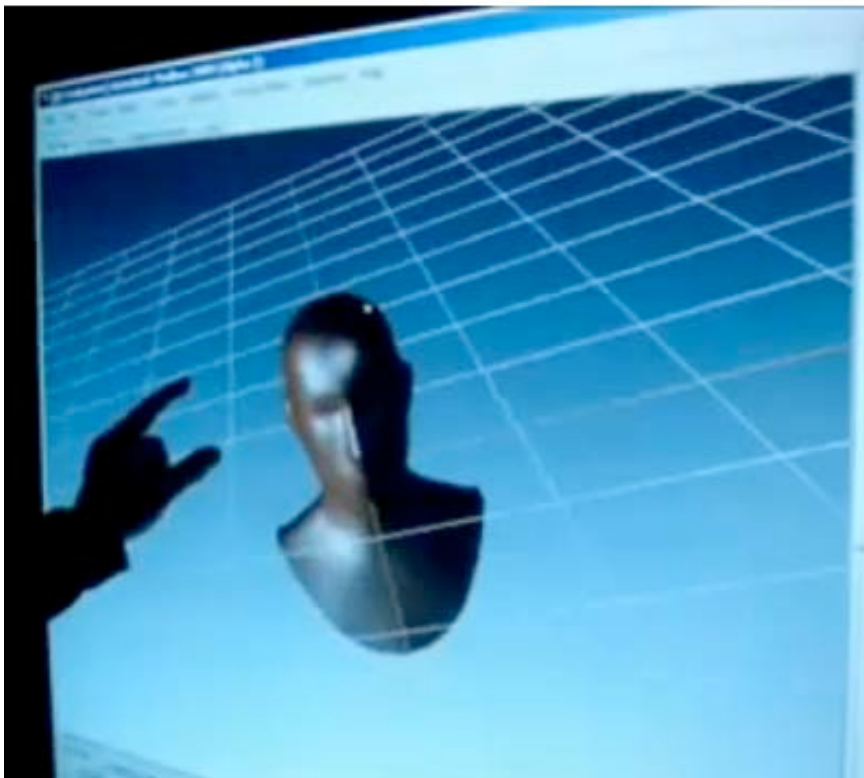
## Autodesk Design on Jeff Han's Perceptive Pixel Multi-Touch

<http://www.youtube.com/watch?v=O7ENumwMohs&feature=related>



## Exploring Mudbox (Autodesk Labs version) with Multi-touch

<http://www.youtube.com/watch?v=wh1Qy6Ov1A>



## Virtual-Reality Multimedia Cocoon Being Designed by NAU

<http://www.cnn.com/2008/TECH/09/11/immersive.cocoon/index.html#cn-STCPhoto>



## Interactive architecture

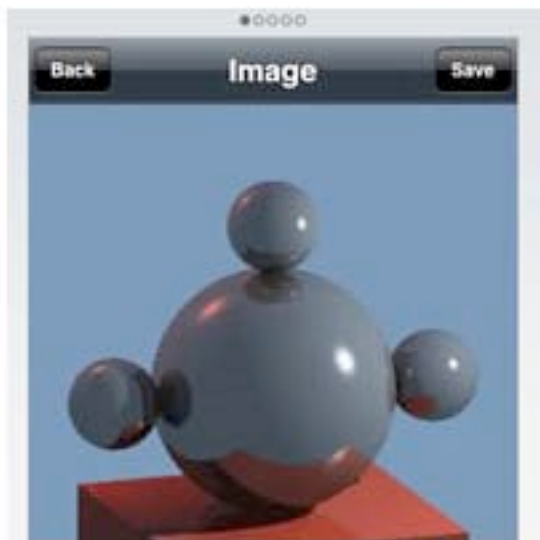
[http://designcorner.blinkr.net/Interactive\\_Architecture/?page=2](http://designcorner.blinkr.net/Interactive_Architecture/?page=2)

Declan Shaw – Waiting and the Reconstruction of Imagination



## It's Here. iTracer Puts 3D CAD... On the iPhone

<http://www.solidsmack.com/3d-cad-technology/3d-cad-multi-touch-itracr-for-iphone/>



## Multi Touch Music Wall

<http://www.youtube.com/watch?v=-qmmdGonQW4>



## Minority Report gets real: Multi-touch hologram

[http://dvice.com/archives/2008/08/minority\\_report.php](http://dvice.com/archives/2008/08/minority_report.php)

## Obscura Digital VisionAire 3D Multi-touch hologram

<http://www.slashgear.com/obscura-digital-visionaire-3d-multitouch-hologram-0513434/>



**Design a Multi-Touch Table and Apply to Interior Furniture Allocation**  
**From Book Series: Lecture Notes in Computer Science (LNCS)**  
**Book: Universal Access in Human-Computer Interaction. Intelligent and Ubiquitous Interaction Environments.**

<http://www.springerlink.com/content/4h97170251842644/>

**Design a Multi-Touch Table and Apply to Interior Furniture Allocation**

Chien-Hsu Chen, Ken-Hao Nien, and Fong-Gong Wu

Department of Industrial Design, National Cheng-Kung University  
 No.1, University Road, Tainan 701, Taiwan  
 chenhsu@mail.ncku.edu.tw, music923@gmail.com,  
 fonggong@mail.ncku.edu.tw

**Abstract.** This is a study based on the integration of FTIR multi-touch technology with Industrial Design to produce a multi-touch table. An multi-touch system interface is also developed through this study. Furniture allocation is applied as the content to provide users practical operating experience on the multi-touch interface. The process includes FTIR structure related testing, hardware technology and specifications; and the exterior design. The system interface includes image recognition system and multi-touch application, and is developed in FLASH. This study not only uses the easy-to-use characteristics of the multi-touch technology but also integrates PV3D to link the 3D scene with the user interface. This provides a real-time 3D simulation image that the user can view the result of the furniture allocation while controlling the user interface. Observation and interviews are made on the users to evaluate the advantages and related problems of the multi-touch technology for future study and development.

**Keywords:** Multi-Touch, Interior Design.

**Illuminate Multi-Touch Table Display Screen and Multi-Touch Surface Computer Technology**

[http://www.gesturetek.com/illuminate/productsolutions\\_illuminatetable.php](http://www.gesturetek.com/illuminate/productsolutions_illuminatetable.php)



### 100" Multi touch screen prototype with Second Life by Junhee, Yeo

<http://vimeo.com/4232828>



### Cobalt: Open Source P2P Virtual Worlds Browser And Construction Toolkit

<http://news.hiperia3d.com/2008/12/cobalt-open-source-p2p-virtual-worlds.html>



**Day 8: Interactive 3D Heart. Dell Latitude XT2 Tablet Multi-Touch Reviews by 22Miles.com**

<http://www.youtube.com/watch?v=bvPw03n8Wxg>

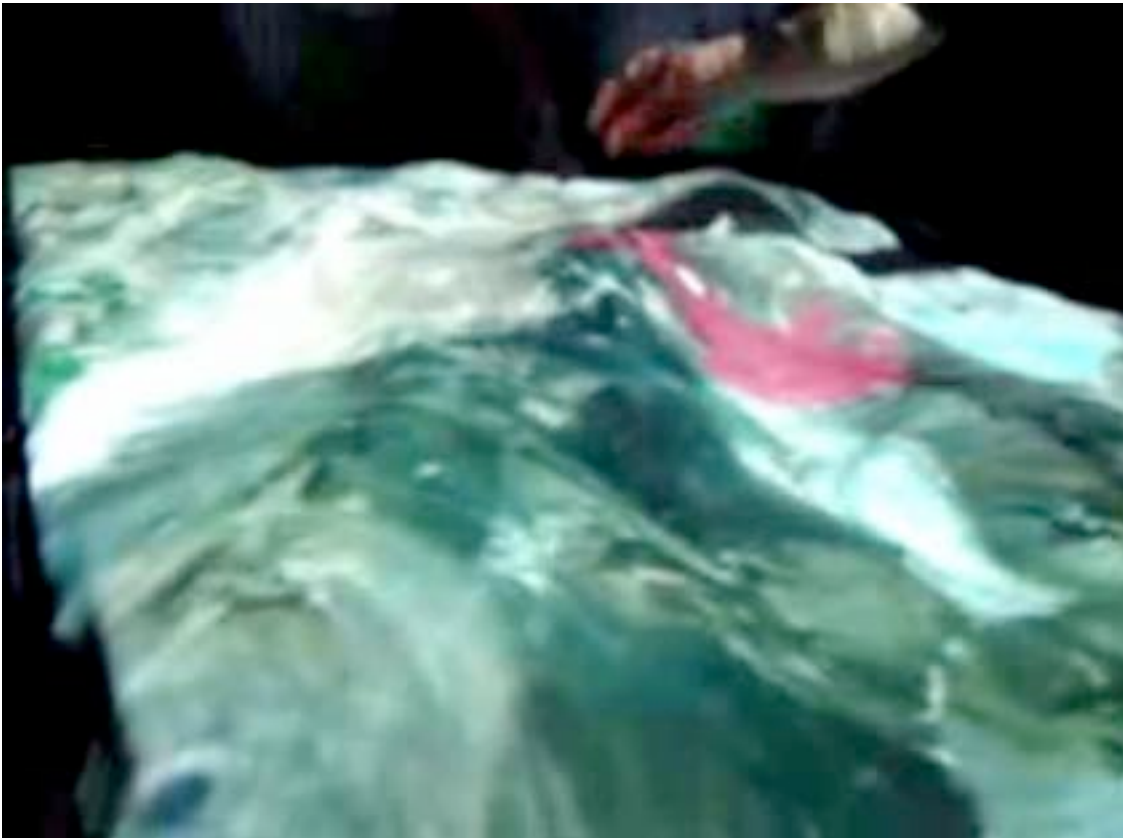
**CES 2009: Intel 3D Touch-screen Display**

<http://www.youtube.com/watch?v=73CGOjkwKdQ&feature=fvw>



## Holographic GIS using 3D Touch Table

<http://geomaniaa.blogspot.com/2009/06/holographic-gis-using-3d-touch-table.html>



## Illuminate Displays and Multi-Touch Surface Computing Solutions for Interactive Screens, Walls and Windows

[http://www.gesturetek.com/illuminate/productsolutions\\_illuminatedisplay.php](http://www.gesturetek.com/illuminate/productsolutions_illuminatedisplay.php)



## ring°wall - building the wall

The world's largest multi-touch multi-user interactive LED wall, planned and implemented by SENSORY-MINDS.

<http://vimeo.com/6854876>

and <http://www.vimeo.com/6648869>



## 3D Multi-Touch User-Interface Demo

Prototype Application using Perceptive Pixel hardware, demonstrates approaches to simplify 3D object navigation using multi-touch technologies.

<http://vimeo.com/4986602>



## Touch Table Gis working together

[http://www.defensereview.com/touchtable/Northrop%20Grumman%20Touch%20Table\\_1.jpg](http://www.defensereview.com/touchtable/Northrop%20Grumman%20Touch%20Table_1.jpg)



## 5 Steps to Avatar: Reinventing Moviemaking

[http://www.google.com/imgres?imgurl=http://www.wired.com/magazine/wp-content/images/17-12/ff\\_avatar\\_5steps1\\_f.jpg&imgrefurl=http://www.wired.com/magazine/tag/avatar/&usq=\\_\\_huOxSW5ZHWUJHcbr6\\_tUyKdiwn8=&h=440&w=660&sz=91&hl=en&start=1&um=1&itbs=1&tbnid=hl7onVWqmtuSYM:&tbnh=92&tbnw=138&prev=/images%3Fq%3Dinfra%2Bred%2Bcamera%2Bsystem%2Bcinema%2Bjames%2Bcameron%26um%3D1%26hl%3Den%26client%3Dsafari%26rls%3Den%26tbs%3Disch:1](http://www.google.com/imgres?imgurl=http://www.wired.com/magazine/wp-content/images/17-12/ff_avatar_5steps1_f.jpg&imgrefurl=http://www.wired.com/magazine/tag/avatar/&usq=__huOxSW5ZHWUJHcbr6_tUyKdiwn8=&h=440&w=660&sz=91&hl=en&start=1&um=1&itbs=1&tbnid=hl7onVWqmtuSYM:&tbnh=92&tbnw=138&prev=/images%3Fq%3Dinfra%2Bred%2Bcamera%2Bsystem%2Bcinema%2Bjames%2Bcameron%26um%3D1%26hl%3Den%26client%3Dsafari%26rls%3Den%26tbs%3Disch:1)

