



HIPERWALL FROM RESEARCH PROJECT TO PRODUCT

Stephen Jenks, Ph.D.
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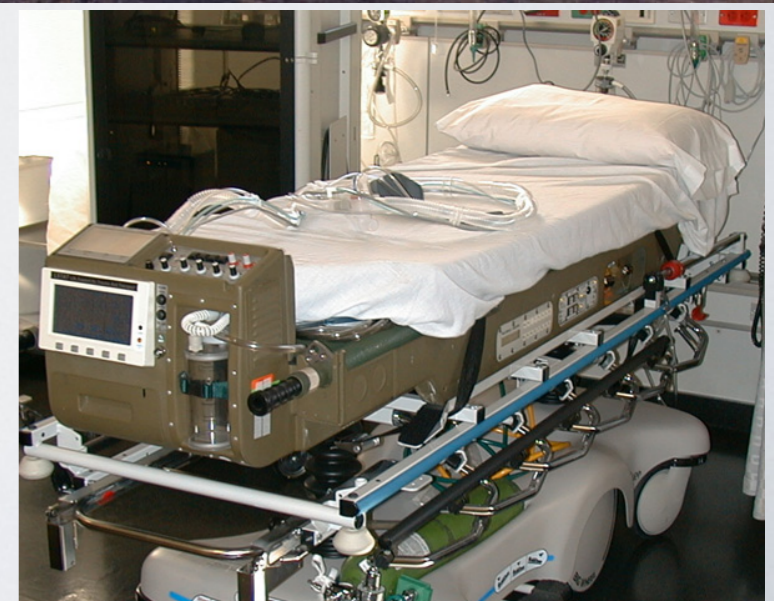
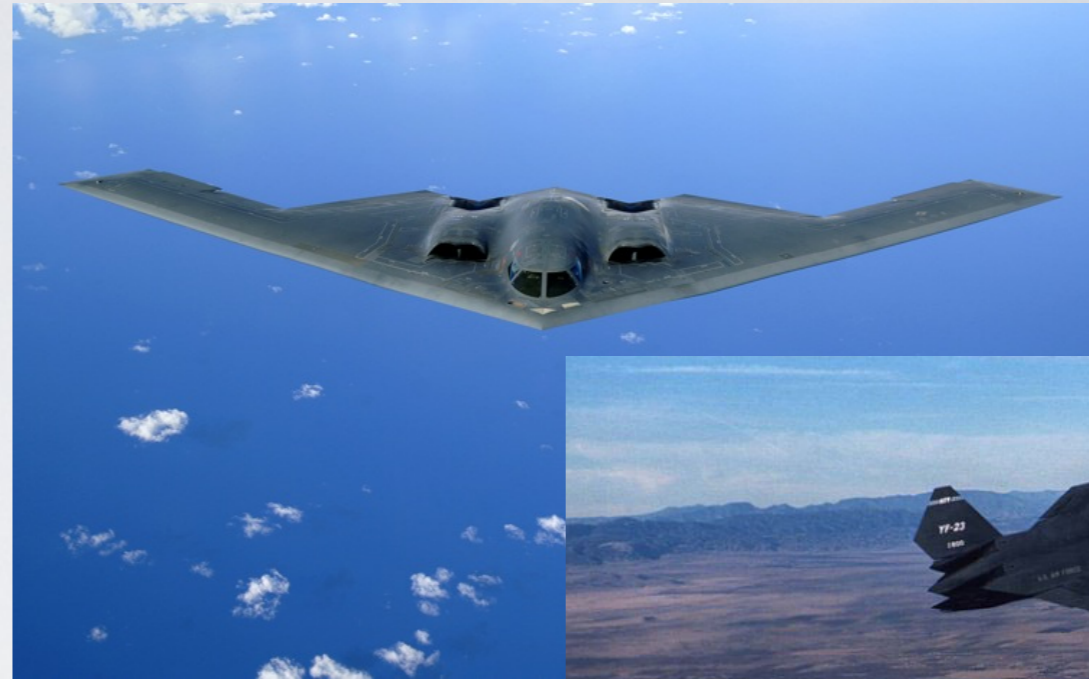
ABOUT ME

- Education

- B.S. EE & Comp.E. Carnegie Mellon
- M.S. & Ph.D. Comp.E. USC

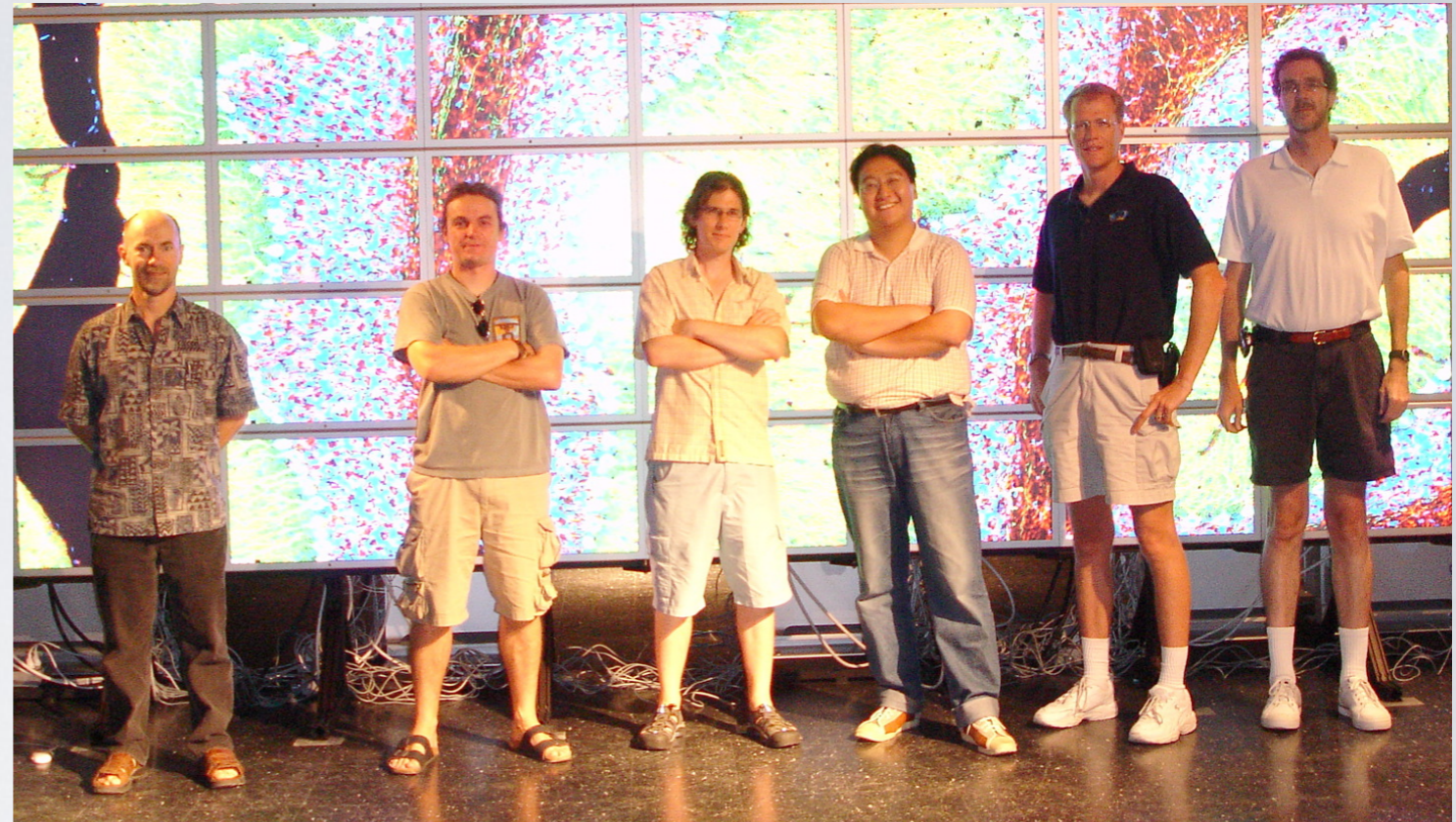
- Experience

- Northrop Grumman-Avionics & Medical Systems
- UC Irvine-EECS Professor
- Hiperwall Inc.-Chief Scientist



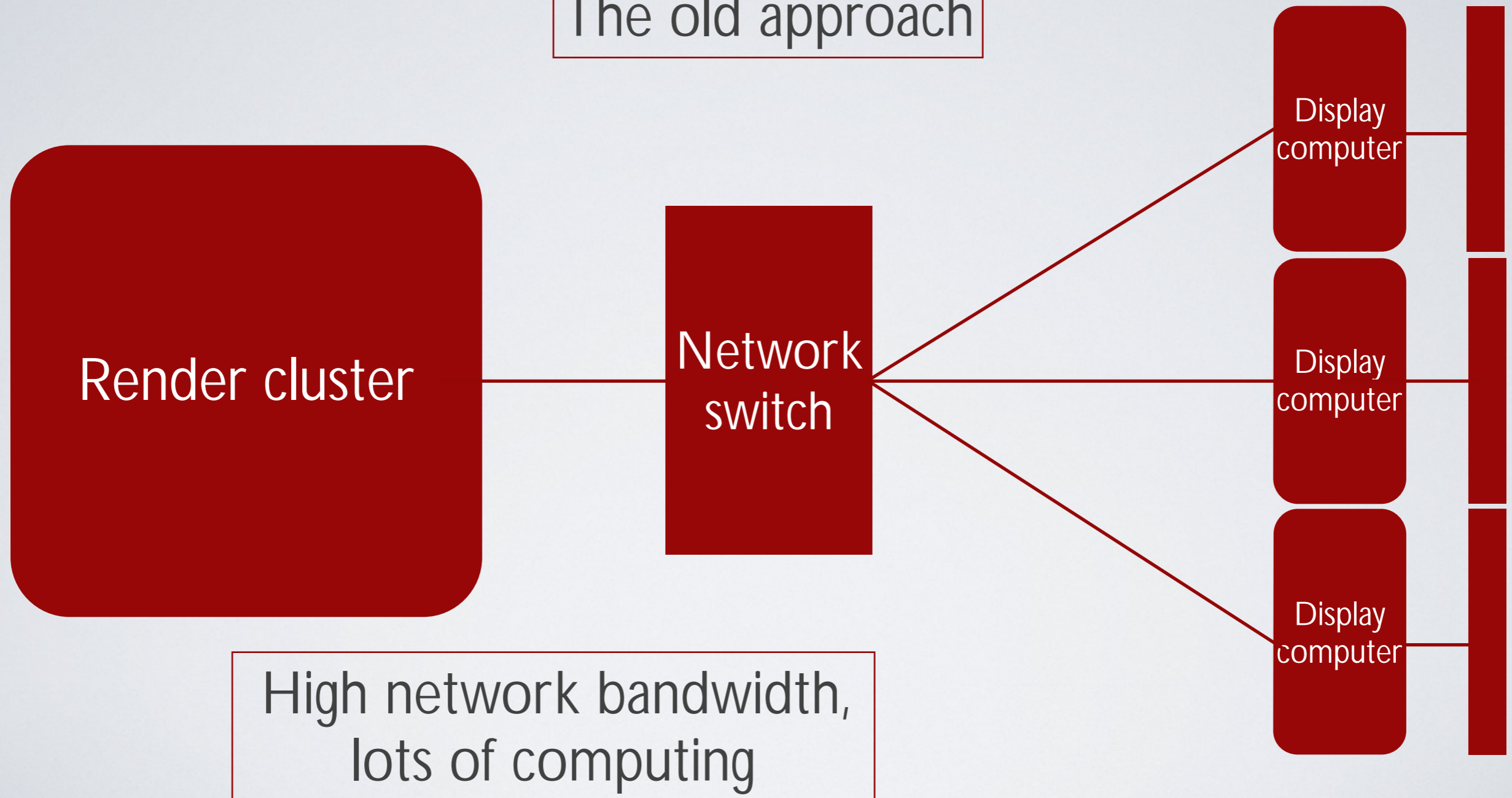
THE BEGINNING

- In 2004, Falko Kuester and I won NSF MRI grant to build world's highest res display
- Highly Interactive Parallelized display Wall (HIPerWall)
- 200 Million Pixels
 - 50 30" Apple Cinema Displays
 - 25 PowerMac G5s



THE TECHNOLOGY

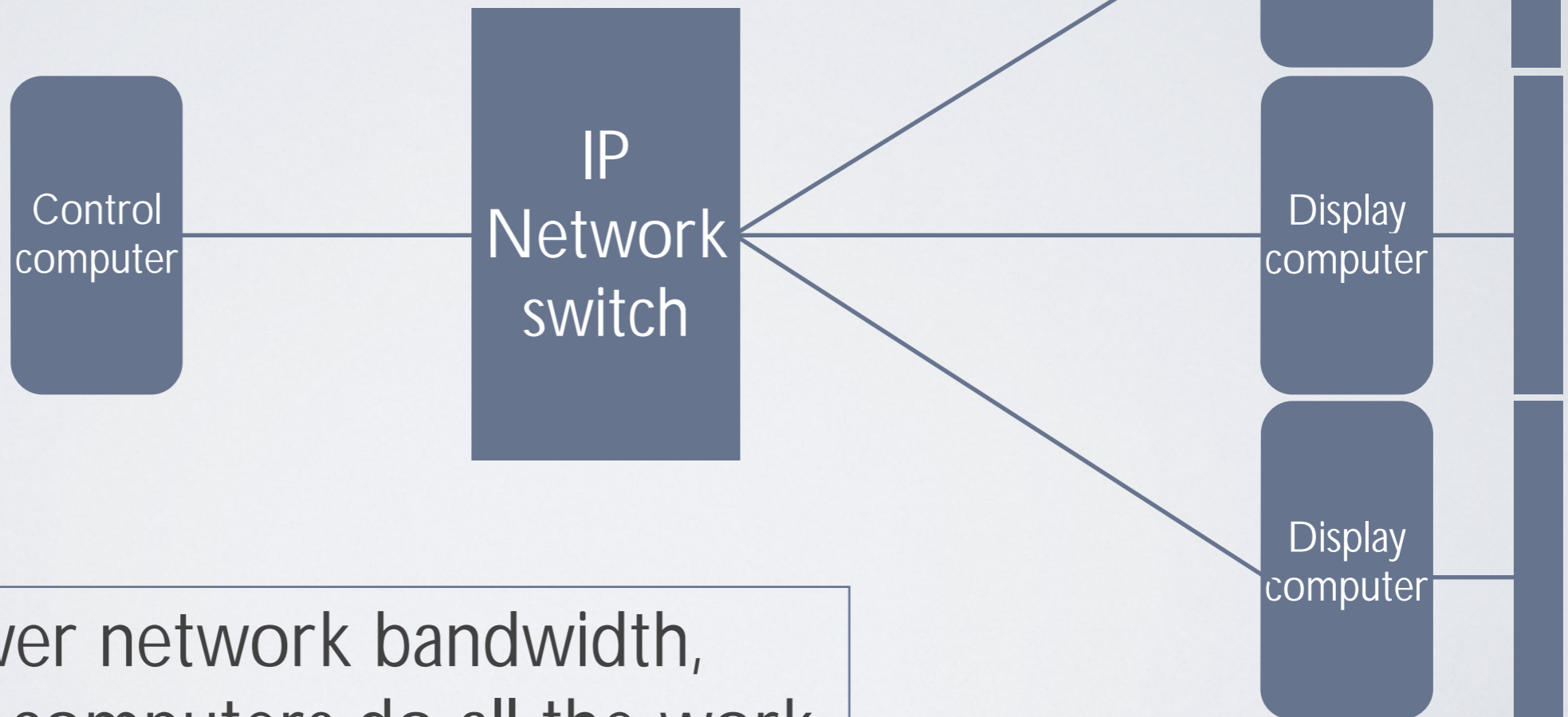
The old approach



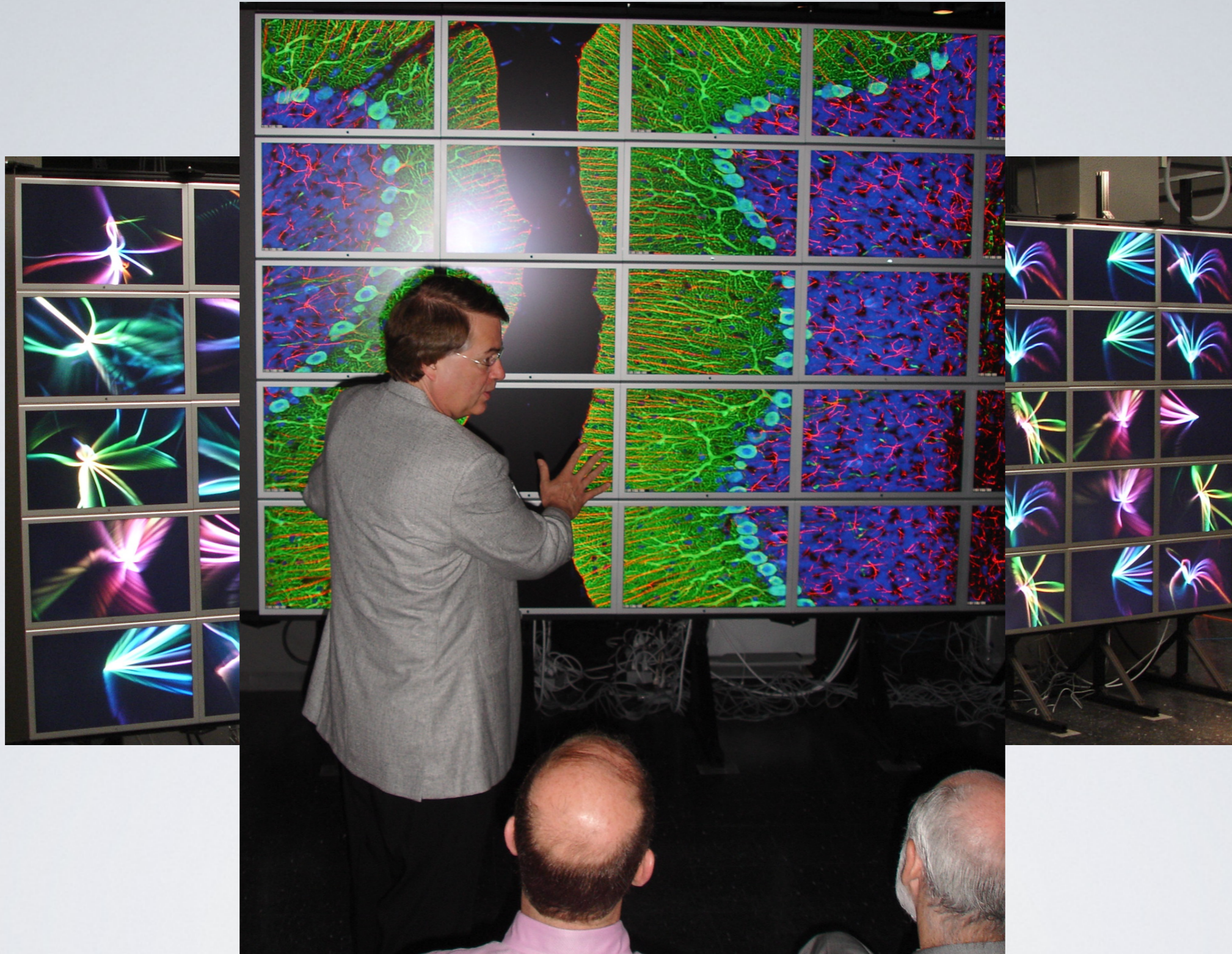
THE TECHNOLOGY

Software by
Ph.D student
Sung-Jin Kim

The HIPerWall approach
utilizes parallel and
distributed computing



Lower network bandwidth,
Display computers do all the work



INITIAL DEMO

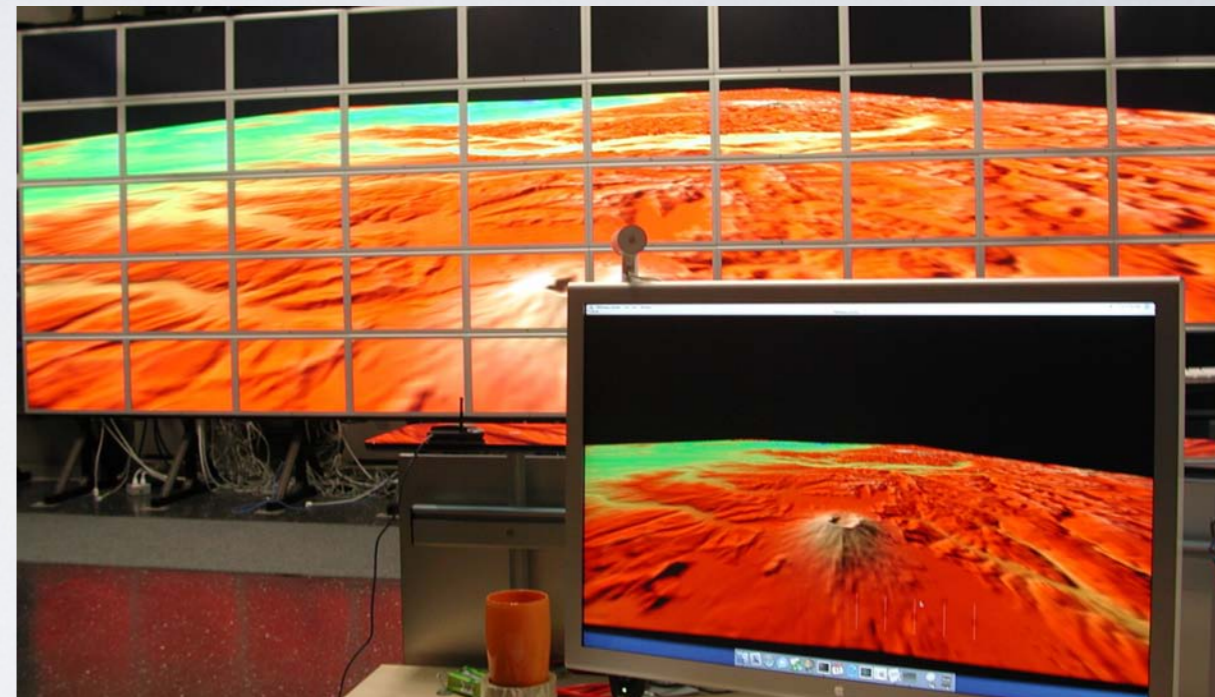
NEW FUNCTIONALITY



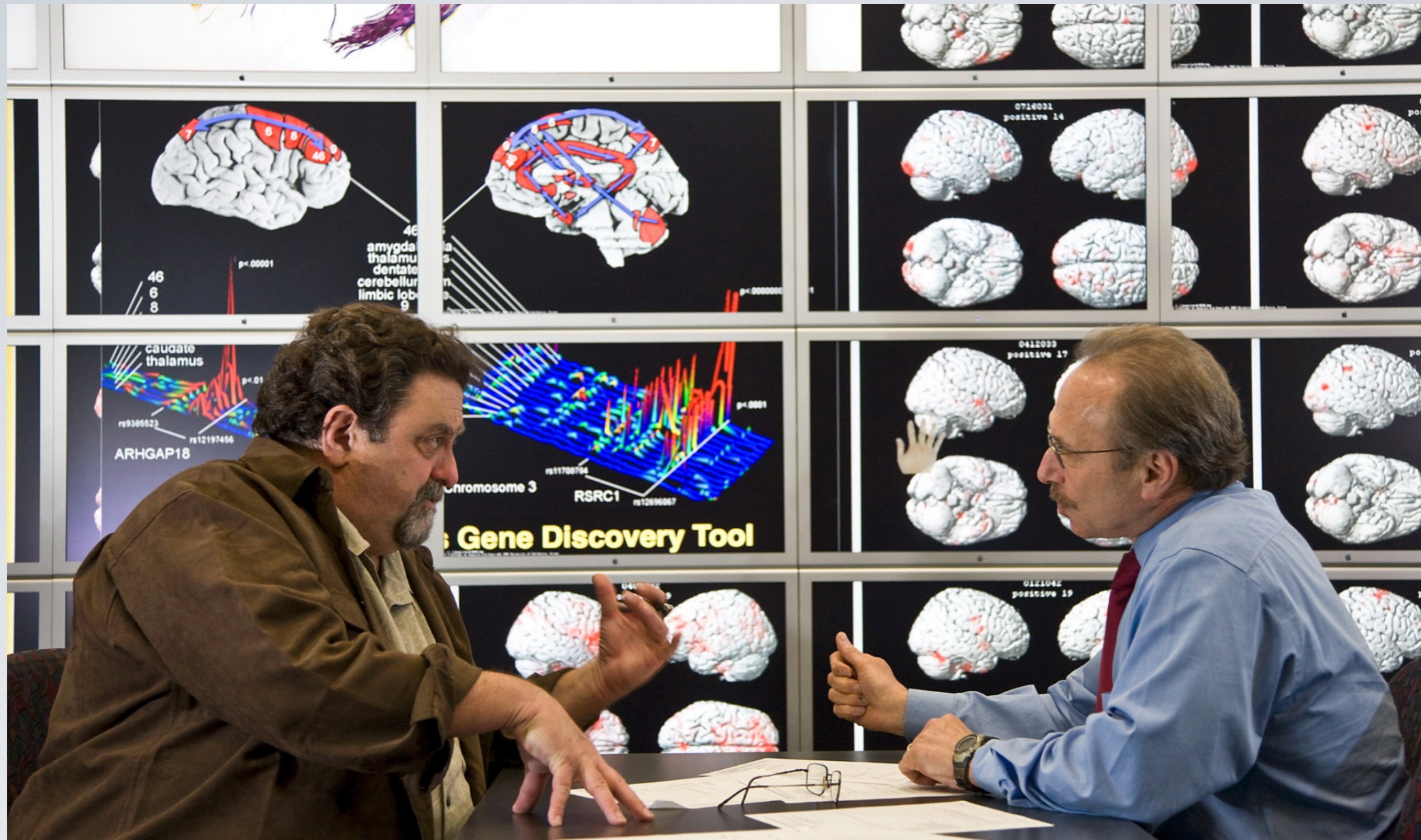
Movies



fMRI Data



3D Terrain



NEW USES

MEDIA COVERAGE

Sunday, October 23, 2005

The next next big TV

By **TAMARA CHUANG**
The Orange County Register

Researchers at UC Irvine have linked 50 Apple monitors to create a great wall of TV, dubbed the HIPerWall, or Highly Interactive Parallelized display. With it, they can show extremely-high-resolution pictures, like satellite images and aerial photos of the campus.



VIDEO WALL: The HIPerWall team includes, from left, UCI Professor Stephen Jenks, project director Falko Kuester and Christopher Knox, a postdoctoral researcher. The wall uses 50 extremely-high-resolution monitors to effectively form one giant, detailed screen.

LEONARD ORTIZ, THE REGISTER

Why would anyone need this? Medical imaging, climate data and satellite photography that could only be viewed partially or slice by slice can now be seen in detail on the big screen, said Falko Kuester, one of the system's designers and a UCI assistant professor of electrical engineering and computer science.

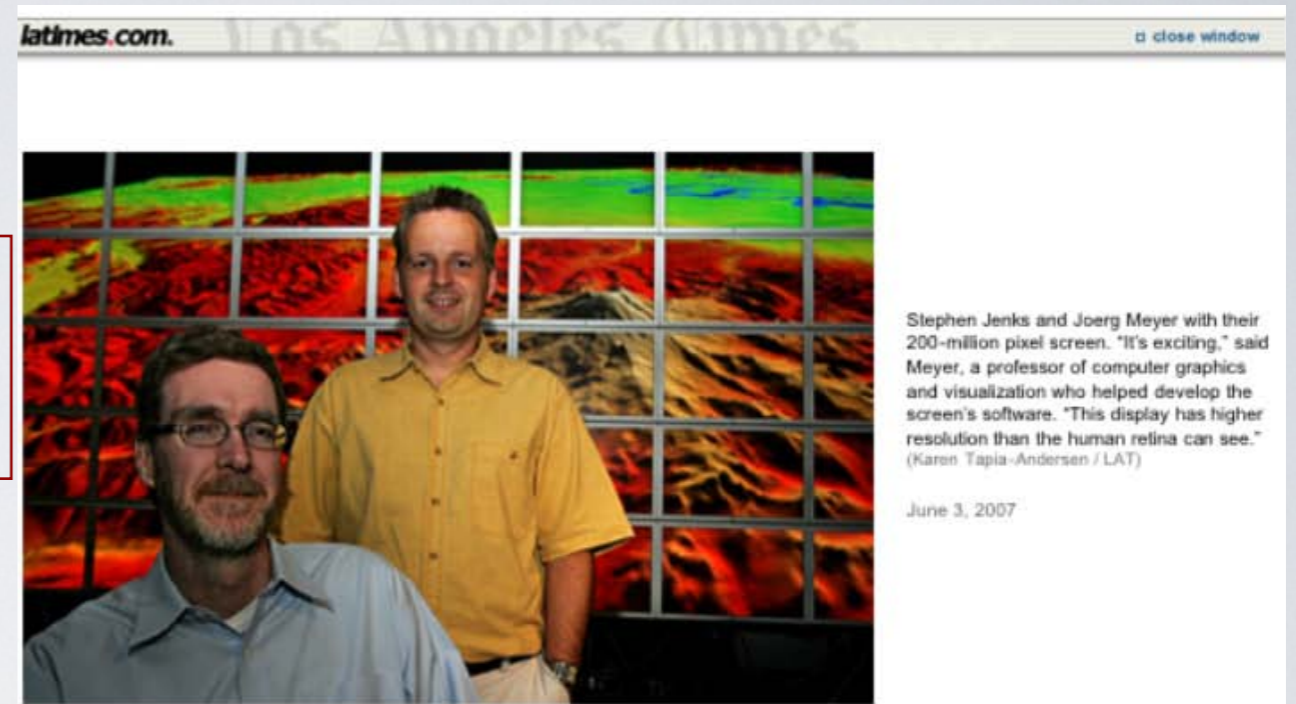
Kuester and his team at the Calit2 Center of GRAVITY (which stands for Graphics, Visualization and Imaging Technology) developed the software that makes the 50 monitors behave as one. The HIPerWall is being used to study geography patterns, such as the damage done by Hurricane Katrina, and to compare details of human brain activity by medical researchers. No need to crowd around one monitor.

"We need to do 3-D," says Kuester, giving a hint of what's to come. "At the consumer level, this could be a smaller package that supports three or four displays. The eventual goal is this will be a wall in your house."

http://www.ocregister.com/ocregister/news/article_726920.php

OC Register
10/23/05

LA Times
8/13/07



Stephen Jenks and Joerg Meyer with their 200-million pixel screen. "It's exciting," said Meyer, a professor of computer graphics and visualization who helped develop the screen's software. "This display has higher resolution than the human retina can see." (Karen Tapia-Andersen / LAT)

June 3, 2007



CNN
8/20/07

NEW HIPERWALL CAPABILITIES

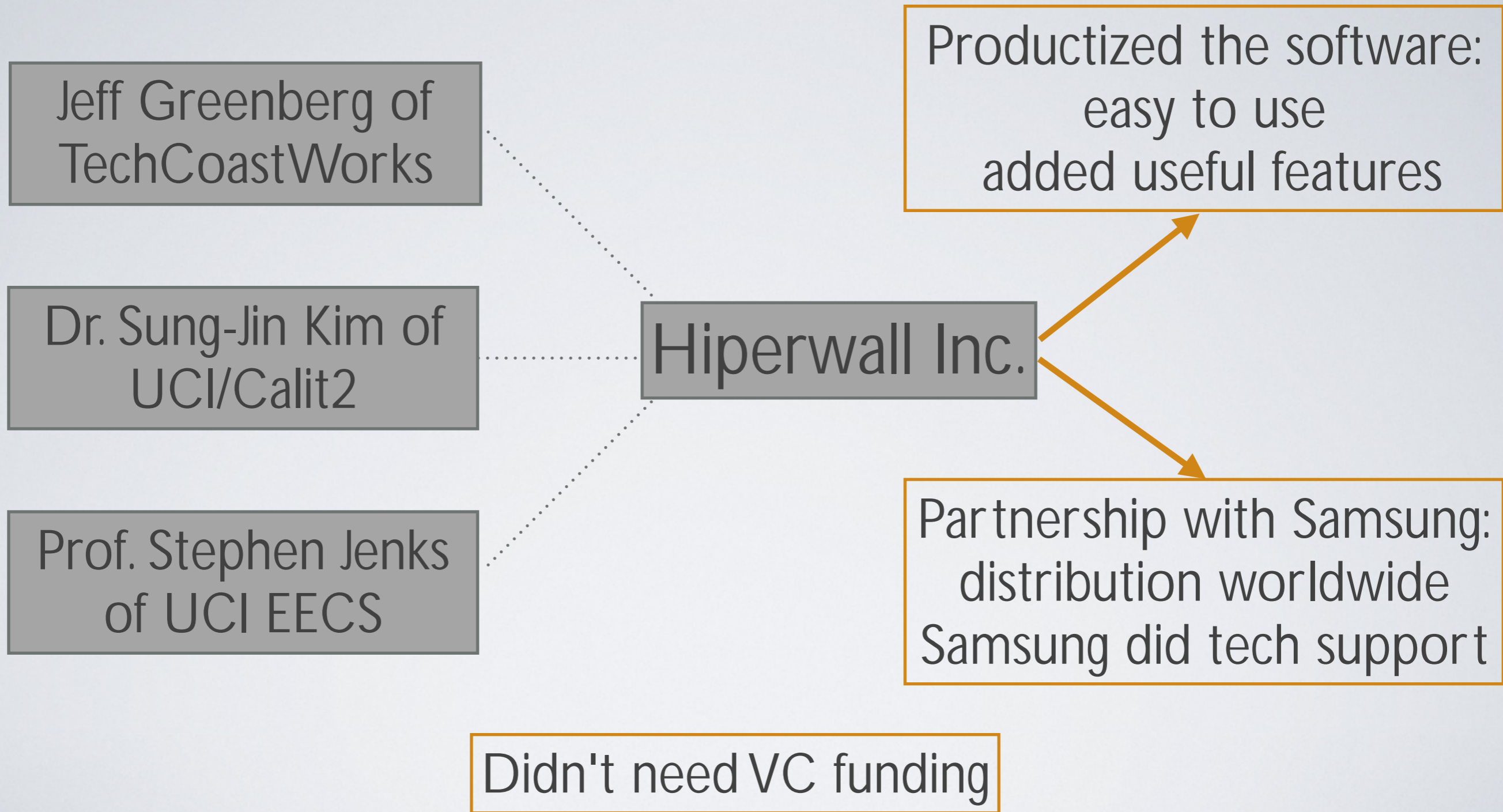


Google Earth

ScreenSender



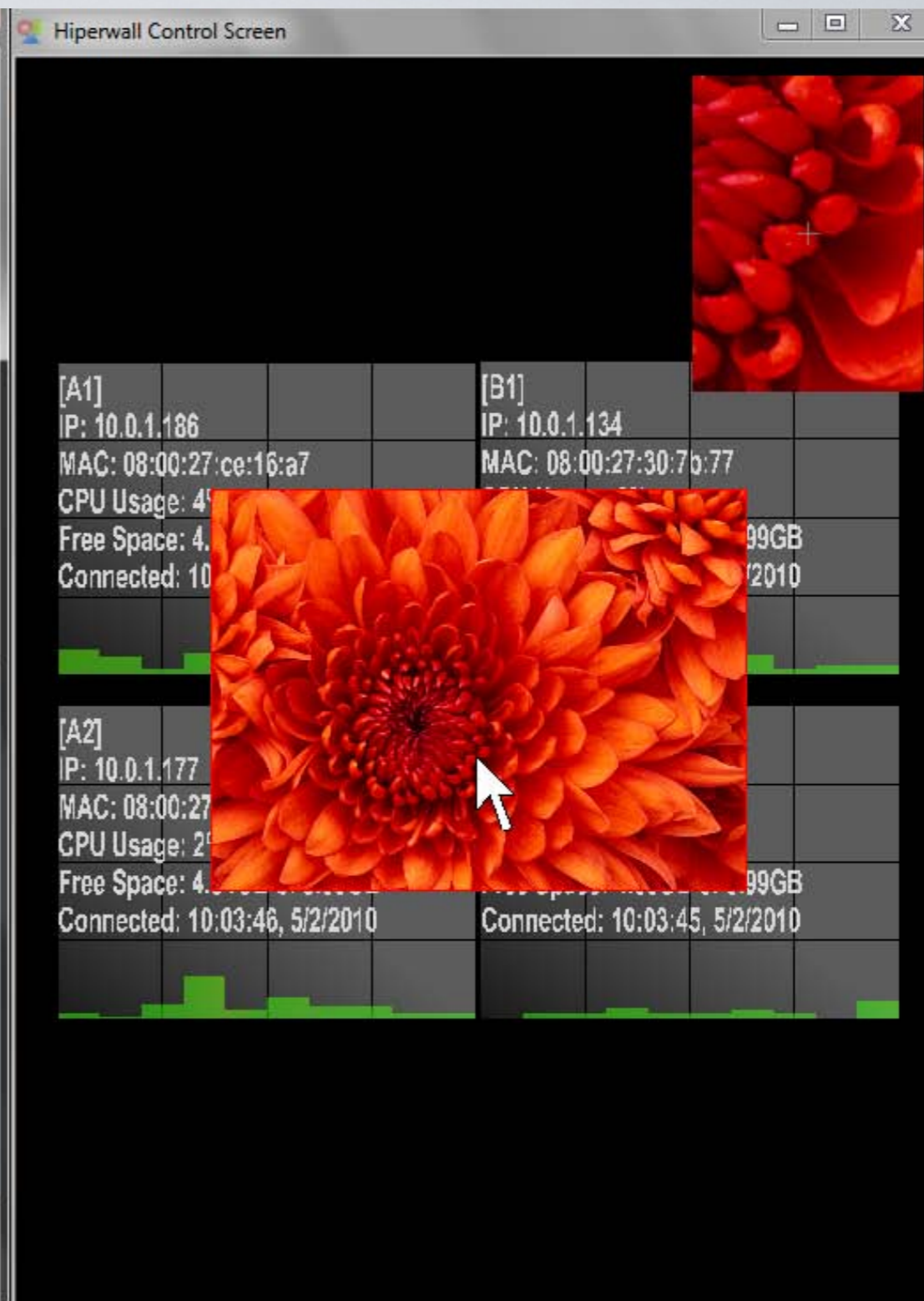
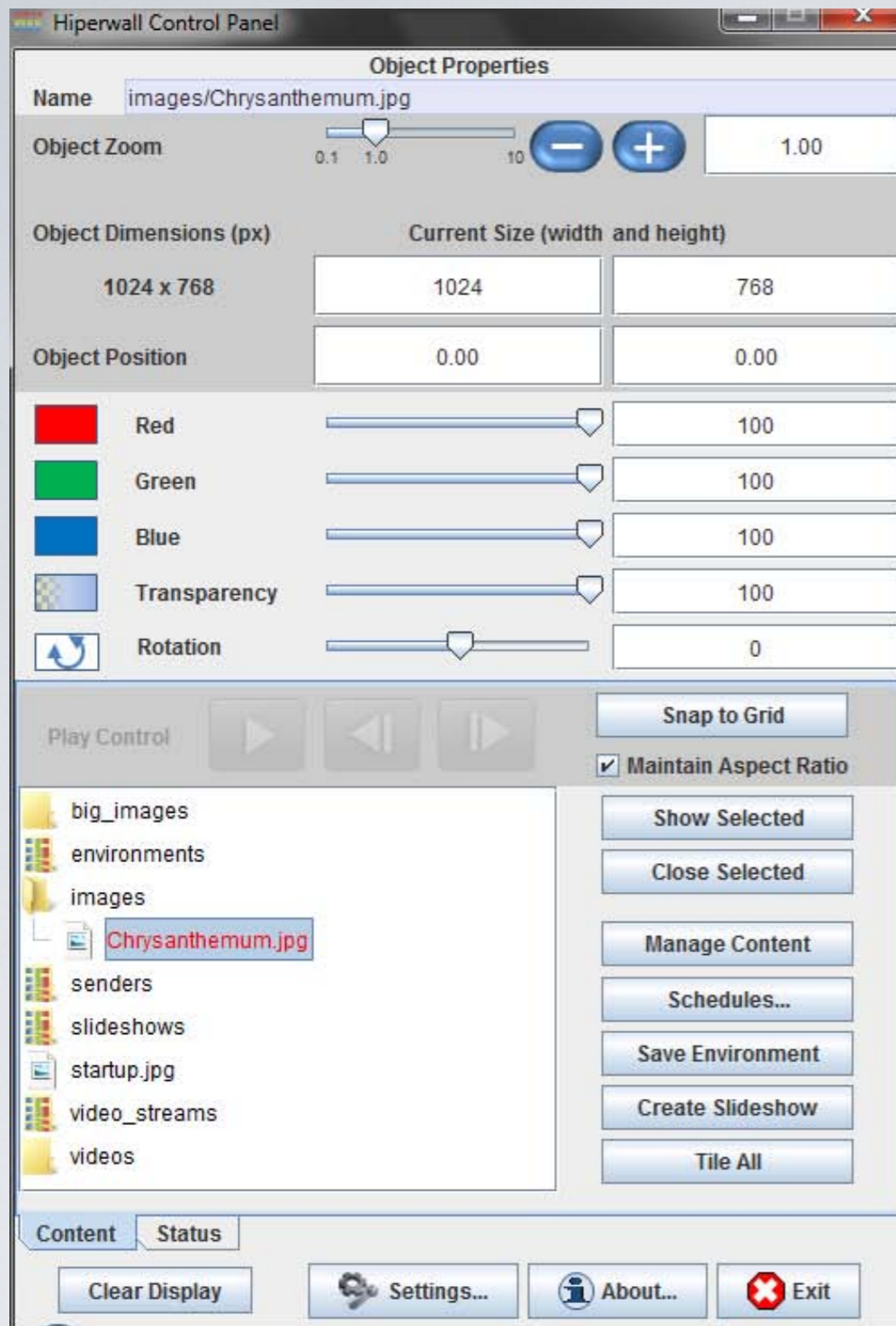
COMPANY FORMATION



NEW CAPABILITIES FOR COMMERCIAL MARKET

- Screen Sender - show screen of any PC on wall (web pages, PowerPoint)
- Environments - save and restore the state of the content on the wall
- Slideshows - step through multiple content objects
- Scheduling - content displayed at specific times





FRIENDLY USER INTERFACE

ACHIEVEMENTS



Kenmore Live Studio



Free Speech Display
at Calit2/UCI



Brussels Airport

Information Week's Startup of
the Week, 1/24/09



Water presentation to
Congresswoman Napolitano
> 100 Installations Worldwide

ADVICE TO RESEARCHERS

- Protect your ideas (patents: file invention disclosures). Follow up and keep track of patent progress.
- Stick with your strengths, bring on a business person, but learn about the business issues
- Make a product that solves a customer problem
- Utilize UCI Business School connections
- Continue to think of improvements/next-gen product
- VC money not bad: better to have 10% of a lot than 100% of nothing.

COMPANY INFO



- <http://www.hiperwall.com>
- Twitter: <http://twitter.com/hiperwall>
- Facebook: Hiperwall
- Presentation: <http://www.stephenjenks.com/?p=216>