

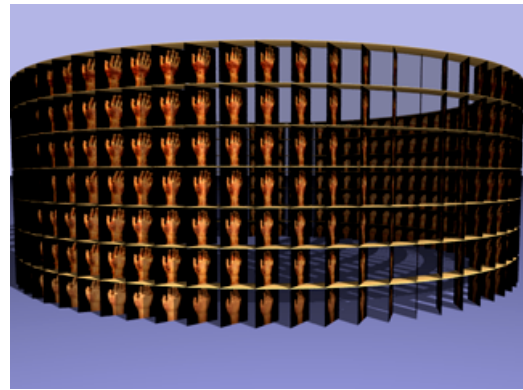
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## SUMMIT, Stanford University: Remote Stereo Viewer (RSV)

| Application Features                           |   |
|--|---|
| 3D Stereo images                               | ✓ |
| Interactive                                    | ✓ |
| Ability to turn labels on and off for quizzing | ✓ |

### Description

Remote Stereo Viewer is an educational tool that provides medical educators and students, in geographically dispersed locations, the ability to collaboratively view three-dimensional interactive stereo photographs of anatomical structures.



### Educational Practice

Anatomy instructors at Stanford use Remote Stereo Viewer to help students understand the structure, relationships, and functionality of a particular aspect of the human body. Since the selected anatomical specimen can be viewed in various stages of dissection, the student can go back and forth between various layers to better understand the intricacies and complexity of the anatomical feature being studied.

Value added features such as a 3D pointer and a basic labeling function have been incorporated into RSV. At the present time, we have created a virtual hand, skull, and knee using RSV. A typical anatomical structure is represented by 700 to 1200 images, each requiring transmission of 200-500 KB of compressed data. These have been used in teaching with Stanford medical students and are well received.

### End to End Performance

The images are stored on a server and then individually downloaded to a workstation on demand. Individual users take on the role of “leader” and “follower”, which are interchangeable, to collaborate in real-time to create a “virtual classroom”. The application requires high bandwidth because of the high-resolution stereo images. At Stanford the application is used via Internet2 and requires at least 35Mbps transport.

### Project Team

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