Final Project Brainstorming

Spatial Data Structure Teams
- KD Tree: James, Amina, Tyler
- Octree: Greg, Mary, Nick
- Oriented Bounding Box (OBB) Tree: Chris, Andrew, Jonathan, Cagri
- Modified BSP Tree: Evan, Dan, Will, Elsa

- Team of 3-4 (at least one arts student)
- Randomly pick one term from each category:
  - Application
  - Media
  - Technology
  - Theme
  - Modifier
- Propose a 1 week/1 semester/multiyear Project
  - Combine terms in an interesting & non-arbitrary way
  - 2 minute elevator pitch of your visualization
    - why? motivation
    - who? audience
    - what? goals & milestones that you will accomplish
    - how? what existing software & skills of your team members will you leverage

Dynamic Projection Surfaces for Immersive Visualization

Our System Goals/Requirements
- Large, human-scale projection environment
- People move freely within the space
- Projection surfaces can be moved interactively
- Varying illumination conditions
- Robust & real-time tracking and display

Architectural Daylighting Design
- Windows, wall colors, & time of day controlled through iTouch interface
Volumetric Visualization

- Cross sections of a 3D medical dataset virtually placed within the projection volume

General User Interface Elements

- Projection surfaces as input devices
- No instruction necessary to play the game!

Dynamic Projection Environments for Immersive Visualization

Panorama from Gehua Yang, DualAlign