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## Research Area: Peripherals for enhanced immersion in scientific visualization venues

The project aims to incorporate peripherals that will enhance scientists' sense of immersion while using various display venues. This can lead to improvements in the discovery process that occurs during visualization of scientific data. Peripherals can help create an illusion of realism for 3-dimensional scenes rendered from computational science datasets. Peripherals beyond a standard keyboard and mouse are needed for larger visualization venues such as ORNL's EVEREST (Exploratory Visualization Environment for REsearch in Science and Technology) facility and other tiled environments.

### Specific Subtasks:

1. Researching the current state of tracking technology in the fields of consumer and industrial applications.
2. How easily can these technologies be incorporated to the current visualization infrastructure?
3. What are the best solutions for recommendations for medium PowerWalls, large PowerWalls, and non-coplanar displays?
4. What is required to track in distributed (cluster-driven) visualization environments?

### Research Mentor:

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