

# Volumetric Display

## Innovative Student Research Proposal

2012

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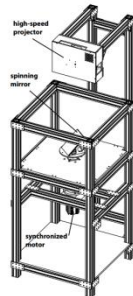
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### Desired Funding Dates:

Winter Quarter, 2012 - 2013

Spring Quarter, 2013

### Abstract:

Funding is being requested in order to build a rotating-mirror volumetric display, with which to display three-dimensional data in a more natural form and to assist in the comprehension and utilization of said data. Through the use of a high-speed projector, spinning mirror, holographic diffuser, and a field-programmable gate array (FPGA), the constructed system will display a three dimensional (volumetric) multi-view image. This system will be modeled after a similar system developed by the University of Southern California's Institute for Creative Technologies [Jones, et al.]. Since this subject matter is outside the current realm of research in RIT's Center for Imaging Science, it allows for an empirical expansion within the Center into different applications of imaging science. The team members of this project are all prior participants of the Freshman Imaging Project course and have experience with the development of experimental imaging systems. Much like our previous system, our proposed project will culminate in the dissemination of this knowledge at RIT's annual innovation festival, ImagineRIT.

**Award:** 3800.00