Timothy Luciani

Summer 2011

**My Goals:** I want to gain experience in the research environment to better prepare myself for graduate school. Also, I would like to extend my knowledge of computer graphics and end the summer with results my partners and I can be proud of.

**Project:** My project will be a continuation of my work last semester on the Astroshelf. I will be in charge of maintaining and correcting the existing graphics interface as well as any advances that need to be added. Also, my work will not be limited to only the Astroshelf, and will work on other projects as Professor Marai sees fit.

**Work Plan:** My first order of business will be to fix the image stretching issue Astroshelf currently has. Next, I will work on the image resolution problem. As of right now, the images are being streamed and stretched as JPEGs. Because of this, they are losing relevant data, as well as resolution. My next goal in the project will be to create a FITS image parser for PHP and switch the images of the project to them. Finally, these images are extremely large, so to alleviate this, I will implement virtual texturing as a way to alleviate bridge what the user sees with how far away they view it.

**Time Line: (end of week)**

**Week of May 8th**: Fix the stretching corrected and have a deliverable.

**Week of May 22nd**: Have the FITS parser up and working inside the Astroshelf with deliverable.

**Week of May 29th:** Begin work on Virtual Texturing