Eric Sokolowsky
CS 584 - Final Project
A Parallel Ray Tracer

My project consists of two parts: An API that abstracts communication between processors on different machines, and a raytracing program that uses the API to communicate work load and results between computers.

API features:

- Portable (compiles and runs on SGI, Linux, HP-UX)
- Cross-architecture compatible
- Multiple processor support using POSIX threads
- Add multiple hosts to a current job
- Communicates with pipes and sockets
- Critical code block protection (using semaphores)

Raytracer features:

- Scattered (via mod) pixel distribution
- Dynamic load balancing
- View image in progress