The Art and Interdisciplinary Programs of SIGGRAPH 95 COMPUTER GRAPHICS Annual Conference Series | 1995 A Publication of ACM SIGGRAPH visual proceedin

# interactive

## entertainment

his project is a music-based immersive virtual reality entertainment experience.

Using virtual reality technology, the experience takes visitors on a train ride through an imaginative landscape. The simulated adventure begins aboard a photo-realistic steam locomotive. As they leave the station behind, passengers move downward through a tunnel of swirling mist and cruise among the shifting forms and intricate patterns they discover along the path.

But this is no ordinary VR experience. Fakespace's virtual locomotive is fueled by music. In fact, music drives nearly every aspect of the synthetic journey and generates the forms that occupy the land-scape. Visual music techniques (orchestration as well as improvisation) generate an infinite number of unique immersive experiences.

Alexander Scriabin was the first composer to map color to his music. This led to the development of novelties such as color organs, simple fore-runners of this project, which is the current culmination of Fakespace's use of music to create simulated reality. In the train adventure, abstract images become merged with realism. Virtual VU meters twist in kaleidoscope fashion as the music directly drives the visual images.

Traditional music videos will eventually pale in comparison to the excitement of participating directly with synaesthetic environments. When synaesthesia, the reintegration of the senses, is combined with interactivity, the result is a powerful experience of virtual imagery, playful exploration, and experimentation. This is more gratifying and far more memorable than passive viewing ever could be. It will eventually lead to virtual music parlors in entertainment centers.

Soundscapes Entertainment uses the powerful Onyx Reality Engine and Fakespace BOOM 3C, a high-resolution stereoscopic display, to present a rich, dynamic environment complemented with exquisite textures. The experience is created with Fakespace's proprietary software library running on top of Performer, which provides a fully immersive experience primed for intuitive exploration of the visual landscape. Soundscapes Entertainment can be configured for site-specific installations as individual stations or multiple-viewing stations. Multiple displays can function as repeat monitors of a master station, or they can be networked as multi-user stereoscopic entertainment kiosks.

#### Fakespace, Inc.

Christian Greuel 4085 Campbell Avenue Menlo Park, California 94025 USA +1.415.462.5830 +1.415.688.1949 fax xianatro@crl.com

#### Collaborators

Christian Greuel Mark Bolas Ian McDowall Niko Bolas

### Hardware/Software

Onyx Reality Engine
Fakespace BOOM 3C
and headphones
IRIX 5.2
Performer
Fakespace Music Soundscape
Library



