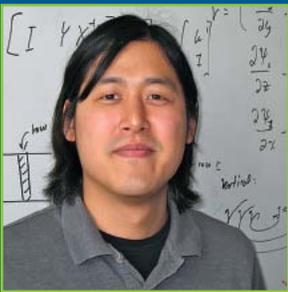


GRITtalks

Research Worth Sharing

Ground-breaking Research/Innovative Technology



Monday, July 15

THEODORE KIM

Professor – Media Arts and Technology

Math and Physics Go to Hollywood

Computer generated imagery has become pervasive in movies over the last two decades. This approach has been extremely effective because it applies the physics of light and matter to complex scenarios that would be impossible for an artist to capture with just a paintbrush. In this talk, I will give an overview of the industrial-strength mathematical tools used to compute realistic animations. While these tools can be extremely powerful, they are only effective if an artist can use them to achieve some intended visual effect. How can we make the laws of physics controllable in an intuitive and artistically meaningful way? What is the best way to bend natural laws when you actually want to portray something supernatural? I will describe some of the tools that have been developed to this end, including my own “wavelet turbulence” algorithm, which has been used in over two dozen movies.

Wednesday, July 17

JOSHUA MAILMAN

Visiting Professor – Music

Diving into Flux: Journeying Among Music Theories and Interactive Multimedia Practices



They say Mozart’s music is timeless, and also that art imitates life. Since the time of Pythagoras, theories of music focused on stability and harmony as standards of value in music and in the world we live in. Yet now we are fascinated by the flux and diversity we find in our world. So why not in music? In my research into music from the last thousand years, I reveal the diverse flux that makes it sometimes strangely appealing. This research now fuels my own technological artistic practice through which improvised dance movement steers computer algorithms to create a coherent yet fluctuating complexity of rhythms, harmonies, colors, shapes, and textures: Embodied multimedia performance-art emerging from technologically equipped humanistic research.

5–6pm UCSB Hatlen Theatre
FREE and OPEN TO THE PUBLIC