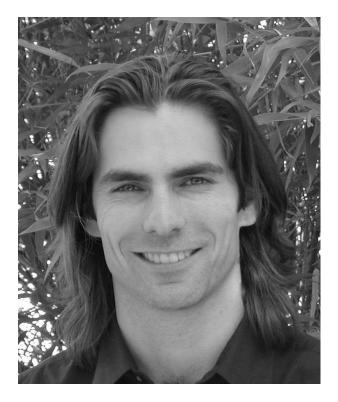
KEYNOTE ADDRESS

THE CHANGING FACE OF ENTERTAINMENT AND THE DRIVING FORCE BEHIND IT: COMPUTER SIMULATION

Richard Kidd

Sony Pictures Imageworks 3008 18th Street Santa Monica, CA 90405, U.S.A.



ABSTRACT

In today's world of entertainment computers are used more than ever to take the viewer to new "places" in games, television & feature films. In games, we drive a stock car around the high banks of the Daytona International Speedway. In television we become part of an alien world at a scheduled time each week, and in feature films we set sail on the open seas on an 85-year old ocean liner. Without computer simulation, there are many reasons why we would not be able to enter these worlds and entertainment would not be what it is today. This paper will discuss the practical use and goals of using simulation in entertainment. With these goals as our guide, we will examine the tools that are used to design our model of the physical system, execute that system, and analyze the output. We will study both the traditional tools and the tools of the future. As desktop computers become supercomputers and multiple CPUs on the desktop become the norm, our mathematical models will become increasingly complex. This increase will lead to more accurate simulations, thereby changing the faces of entertainment and blurring the lines of reality.

AUTHOR BIOGRAPHY

As a leader on two of last decade's most technologically groundbreaking films, Richard Kidd continues to build an impressive credit list with his career in the film industry.

Richard is a University of Florida graduate with a degree in Computer Science Engineering. While still in school Richard began applying his computer skills to entertainment, as the Director of Gator Growl he introduced computer animation to the nation's largest student run homecoming pep rally. Upon graduation, he relocated to Los Angeles and began work as a digital artist on projects like "The Island of Dr. Moreau" and the Universal Studios theme park attraction "T2:3D Battle Across Time."

After these and additional accomplishments, he was challenged with creating and overseeing the team that generated all of the ocean water in James Cameron's Academy Award sweeping "Titanic." After a project of this magnitude, he wanted to sustain the winning streak, so he accepted a position as Associate Visual Effects Supervisor during the preproduction of last year's visually stunning "The Matrix" with Keanu Reeves. Other films to his credit include "Practical Magic", "Chill Factor", "Double Jeopardy", "The Mummy", and "Armageddon." Most recently he completed work as the Digital Effects Supervisor on Robert Zemeckis' "Castaway" and "What Lies Beneath."