This talk describes how the Light Stage scanning systems and HDRI lighting techniques developed at the USC Institute for Creative Technologies have helped create digital actors in a wide range of recent films.

Biography

Paul Debevec is a Research Professor in the University of Southern California's Viterbi School of Engineering and the Chief Visual Officer at USC's Institute for Creative Technologies where he leads the Graphics Laboratory. Since his 1996 UC Berkeley Ph.D. Thesis, Paul has helped develop data-driven techniques for photorealistic computer graphics including image-based modeling and rendering, high dynamic range imaging, image-based lighting, appearance capture, and 3D displays. His short films, including The Campanile Movie, Rendering with Natural Light and Fiat Lux provided early examples of the virtual cinematography and HDR lighting techniques seen in The Matrix trilogy and have become standard practice in visual effects. Debevec's Light Stage systems for photoreal facial scanning have contributed to groundbreaking digital character work in movies such as Spider-Man 2, Superman Returns, The Curious Case of Benjamin Button, Avatar, The Avengers, Oblivion, Gravity, and Maleficent and earned him and his colleagues a 2010 Scientific and Engineering Award from the Academy of Motion Picture Arts and Sciences (AMPAS). He currently serves as Co-Chair of the AMPAS Science and Technology Council and is also a member of the Visual Effects Society. http://www.paulDebevec.com/

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