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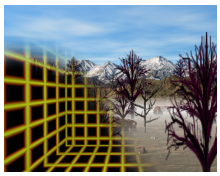
By: Gabriel Gache, Science News Editor



Artistic impression of a holographic deck geocities

HoloVizio, the First Step Towards a Star Trek-Like Holodeck

European researchers create world's first true 3-D display

Imagine the possibilities of having a holodeck. One moment you're in your house and the next you can be anywhere in the world, at any time, doing anything you want. For now, the concept is still very much science fiction, albeit European researchers seem to have taken the first step towards bringing it to reality by developing a true 3-D display as part of the Coherent project, funded by the European Union.The commercial 3-D display, known as HoloVizio, offers new potential for design, education and collaboration, by allowing designers to view 3-D models of various components and even to manipulate them by waving their hand in front of the screen. "The aim of the COHERENT project was to create a new networked holographic audio-visual platform to support real-time collaborative 3-D interaction between geographically distributed teams", said Akos Demeter, the spokesperson for the Coherent project.The project was mostly driven by a collaborative visualization system in the medical sector and a design review system for the automotive industry. The 3-D display is based on innovative holographic projections capable of imaging 3-D models at human scale, which can be realistically animated to give the observer an unlimited number of viewing positions.Unlike previous 3-D holographic simulators, HoloVizio requires no goggles and the images are maintained as they move. However, the real innovation of the Coherent project is the COMEDIA application which can be used to create accurate 3-D anatomical models by exploiting data provided by medical imaging devices. "The strength of the COMEDIA system is related to the collaboration, discussion and evaluation of clinical cases, since it provides users with an immediate 3-D understanding of the anatomy shown", Demeter added.COMEDIA was developed by the CRS4 Visual Computing, which also created rendering and visualization software that can reveal the artistic secrets of great masters, such as that of Michelangelo's sculpture of David, proven to have diverging eyes. This tiny detail is nearly impossible to spot while viewing the statue standing tall in front of you, especially due to the position of the hands, but COMEDIA was able to spot it nonetheless, suggesting that Michelangelo was trying to picture two faces of the same character.Another application emerging from the Coherent project is COLLAUDA, developed by CS Systemes d'Information and Peugeot, to be used in collaborative automotive design. COLLAUDA has already participated in a series of demonstrations for potential users.Now, the European researchers from the COHERENT project believe that holographic systems could also be used for oil exploration techniques, with the help of data provided by Shell. Most of the technology behind the HoloVizio system was developed by the Hungarian research company, Holografika.