UNIVERSITY of WISCONSIN
LA CROSSE

Distinguished Lecture Series in Computer Science

Monday, April 11, 2005

Thomas A. DeFanti, Ph.D.

Thomas A. DeFanti, Ph.D, is director of the Electronic Visualization Laboratory (EVL), a distinguished professor in the department of Computer Science and director of the Software Technologies Research Center at the University of Illinois at Chicago.

DeFanti is an internationally recognized expert in computer graphics and networking. In the 32 years he has been at UIC, DeFanti has amassed a number of diverse credits, including: use of EVL hardware and software for the computer animation produced for the 1977 "Star Wars" movie; contributor and co-editor of the 1987 National Science Foundation-sponsored report "Visualization in Scientific Computing;" recipient of the 1988 ACM Outstanding Contribution Award; elected an ACM Fellow in 1994 and a Fellow of the International Engineering Consortium in 2000. Currently, he is principal investigator of NSF TransLight/StarLight projects that provide a persistent infrastructure to facilitate the long-term interconnection and interoperability of advanced international networking. He shares recognition along with EVL director Daniel J. Sandin for conceiving the CAVE virtual reality theater in 1991.

DeFanti has also been active in the ACM SIGGRAPH organization and in the ACM/IEEE Supercomputing (SC) conferences. Current and past activities include: secretary of SIGGRAPH (1977-1981); co-chair of the SIGGRAPH 79 conference; chair of SIGGRAPH (1981-1985); and continuing editor of the "SIGGRAPH Video Review" video publication, which he founded in 1979.

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Schedule of Events

10 a.m. **Registration,**
Cleary Alumni & Friends Center

10:30 a.m. Keynote

"Telepresence: Better Than Being There"

What will happen when telepresence, that is, our senses travelling to other places at light speed, becomes really good? Many Midwest families are now spending more each month on communications (including telephones, cell phones, Internet access, on-line games and cable TV) than electricity and heat for their homes. These communications technologies are already good enough to replace some of our commuting and travel needs, particularly in shopping, learning, playing and keeping in touch with one another. What uses of telepresence might further replace our energy-consumptive driving and flying around so much, and therefore pay for themselves? What will happen when telepresence is better than being there? Is it already? This lecture will examine cutting-edge visualization and collaboration technology aimed at providing extended tele-realism to our everyday lives.

11:30 a.m. Reception for Thomas A. DeFanti, Ph.D.
Cleary Alumni & Friends Center

3 p.m. **Symposium**

"Extraordinary Resolution Visualization, Virtual Reality and Networking"

The Electronic Visualization Laboratory at UIC has been researching advanced modalities of visualization over networks for over a decade, first hooking up CAVEs as 3D phone booths nationally and internationally. EVL is now addressing the delivery of 4000x2000 (8 megapixel — 4xHDTV) digital motion pictures, the exploration of 55-screen 100 megapixel collaborative spaces and virtual reality needing no special viewing glasses. Providing visualization technologies such as these over distance involves developing new all-optical switching techniques, transport protocols, data handling, security and middleware. Applications in geoscience and neuroscience as well as entertainment are part of this effort to provide guaranteed bandwidth for new visualization application tools and techniques.

4 p.m. **Informal Questions/Social**
Cleary Alumni & Friends Center

"Unfortunate consequences of early experimental head tracking hardware."

For further information about the lecture contact:

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