“Teaching Computer Graphics in a Web-Dominated World”

by

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Abstract:
Computer graphics is a standard offering in almost every computer science and engineering program. For at least 30 years, instructors have been in agreement as to the fundamentals of the area. However, changes in hardware and software have led to major changes in how we teach computer graphics. I will discuss the three key changes (1) the use of standardized APIs starting with OpenGL (2) the effect of programmable shaders and (3) the changes we are now going through with the availability of WebGL, which allows us to integrate three-dimensional graphics with other Web technologies available in HTML5. I will show a variety of student work and, as time permits, some of our multi-projector dome projects.

Bio:
Edward Angel is Professor Emeritus of Computer Science at the University of New Mexico and Founding Director of the Art, Research, Technology and Science Laboratory (ARTS Lab). At UNM, he was Professor of Computer Science, Electrical and Computer Engineering, and Media Arts. Professor Angel is the first UNM Presidential Teaching Fellow. The Seventh Edition of his textbook Interactive Computer Graphics (with Dave Shreiner) was released in 2014. His recent projects include the Partnership for Innovation project “A Consortium for Fulldome Development” and “New Mexico CS for All”, both under NSF sponsorship.

WEDNESDAY, JANUARY 21, 2015 @ 1:00 pm
119 McAdams Hall