



Tutorial: Interactive Introduction to X3D Graphics

Date: Tuesday, April 15th

Time: 09:00 – 12:30 (Half-day Tutorial)

Presenters:

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Abstract: Extensible 3D (X3D) graphics is a collection of open-standards that define a system that integrates network-enabled 3D graphics and multimedia. X3D applications are real-time, interactive, animated systems that can run stand-alone or in networked virtual environments. This tutorial will focus on a commonly used subset of the complete functionality that is encoded in XML. X3D has three encodings XML (.x3d), Classic VRML (.x3dv), and Compressed Binary (.x3db). During the tutorial, the participants will learn hands-on how to build an X3D world, while getting a detailed understanding of the capabilities of X3D.

Specific topics include animation using interpolators and sequencers, scripting, prototypes for extensibility, and a software-visualization case study. We will use the new cross-platform **X3D-Edit authoring tool**. Participants will also be given the latest X3D Software Development Kit (SDK) which contains a wide variety of free + commercial plug-ins, authoring tools, and content.

Reference: **X3D: Extensible 3D Graphics for Web Authors** by Don Brutzman and Leonard Daly, Morgan Kaufmann Publishers, April 2007, 468 pages.



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Craig Anslow is a PhD candidate at Victoria University of Wellington, New Zealand. He is a professional member of the Web3D Consortium. He has a BSc, BSc (Honours), MSc in computer science from Victoria University of Wellington. For his MSc thesis he evaluated X3D for use in software visualization [Ans07]. He has been programming in X3D since 2004. His PhD thesis area is visualizing software corpora and analyzing the visualizations to understand the shape of existing software.

Don Brutzman is a computer scientist and Associate Professor working in the Modeling Virtual Environments & Simulation (MOVES) Institute at the Naval Postgraduate School in Monterey, California, USA. He is one of the original participants involved with VRML since this community effort began in 1994. He is a founding member of the non-profit Web3D Consortium, serving on the Board of Directors. He co-chairs the X3D Working Group and leads X3D technical development efforts. He also serves as the Web3D liaison to the World Wide Web Consortium (W3C) Advisory Committee. He has been teaching VRML and X3D since 1996.