WEB3D CONSORTIUM
WWW.WEB3D.ORG

Web3D Consortium is a non-profit organization open to industry, academic, government and individual members. The Web3D Consortium is committed to the creation and deployment of open, royalty-free standards that enable the communication of real-time 3D across applications, networks, and XML web services.

Our standards X3D and HANIM

MEDICAL 3D

Application Areas:
Medical Modeling
Surgical Training
Patient Education
Health Data Visualization

Features:
Representation of human anatomy in 3D
Association of 2D images (from multiple modalities) with 3D skeletal structure with registration
Accommodate image textures in context of 3D anatomy model
3D Printing and Scanning

INTERACTIVE ROYALTY-FREE 3D SOLUTION FOR THE WEB

X3D and Hanim - Royalty-free open ISO standard of the Web3D Consortium. Specifications are developed by members and ISO Ratified and freely available to the public. The Web3D Consortium continues to design, extend and promote 3D standards to meet new market and technology needs.

Building cohesive technology standards

HL7 and Web3D: Integrating Web3D’s Extensible 3D (X3D®) and Humanoid Animation (HAnim) standards within the HL7 framework to improve the 3D visualization and archiving of health data. HL7 and Web3D standards complement each other, each addressing different problems to meet the needs of data management, visualization, and analysis of health data.

Contact us for information.

JOIN X3D MEDICAL WORKING GROUP

Medical X3D is focused on medical applications that can benefit from real time 3D visualization. These types of applications include medical modeling and simulation for research and education; 3D image rendering for planning and guiding surgical and nuclear medicine procedures; image fusion-the association of specific 2D images from multimodal (PET, CAT, MRI, Ultrasound) scans with one another or with existing 3D images of a given patient.

+1 248 342 7662
Web3D Consortium
650 Castro Street
Suite #120-490
Mountain View,
California 94041 USA
info@Web3D.org

http://www.web3d.org/working-groups/medical
OUR SOLUTIONS

- Web-based volume rendering and segmentation of human anatomy.
- Humanoid Animation (H-Anim) on common models for medical use.
- Web-based haptic rendering of medical volumes.
- Framework for modular incorporation of physiological models to simulate a virtual human within a web browser.

BENEFITS

- Build once and use for cross-platform interactive deployment of shared virtual environments from CAVEs to tablets, from phones to headsets, and everywhere in between Industrial strength.
- Royalty FREE provides the most cost effective solution for commercial and non-commercial use 3D Standards for Web Authors!
- Plug-in free rendering and HTML5 deployments with open source tools: X3DOM and X_ite.

INTEROPERABILITY

Interchange mechanisms between Digital Imaging and Communication in Medicine (DICOM), Health Level 7 (HL7)

Web3D Standards co-evolving with DICOM, HL7, ISO, OGC, Khronos, and W3C standards for interoperability and convergence.

Join the Community
Learn More
Contribute to the standard
It's Royalty Free and Open

Build once and use for cross-platform interactive deployment of shared virtual environments
www.web3d.org/join

1 Human Anatomy
Representation of human anatomy in X3D, including use of Humanoid Animation (HAnim) International Standard for skeleton, skin, motion animation and organs.

2 3D Printing and Scanning
3D Printing and Scanning of medical models, published with attributes and annotation.

3 Mixed Augmented Reality
Components for Mixed Augmented Reality for medical scenes and applications.

4 Security and Privacy
Reuseable record-based security of 3D models using XML Encryption (privacy) and XML Digital Signature (authoritative authentication).

Why choose Web3D Standards:
- It's Royalty free – own your content; there is no reliance on proprietary formats.
- Commercial and open source implementations allowing multiple possible business models.
- Designed and developed through the open source community! Medical, Design, VR/AR, 3D Printing to gaming.
- Build once - X3D is platform agnostic.