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WWW.Web3D.ORG

# X3D: Web-wide interactive 3D

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# Who are we

web|3D CONSORTIUM

**An International, non-profit, member funded, standards development organization**

**Developing the ISO specification X3D for interactive 3D graphics on the Web**

**Our members span from academia, research, industry, government, and professionals**

**A community of technologists, artists and enterprise**

**WWW.Web3D.org**

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# What is X3D (Extensible) 3D

- Originated from VRML, X3D is an ISO standardized specification for interactive 3D graphics.
- A File Format and Runtime API (Javascript, Java, …)
- Multiple encodings (file formats): XML, VRML, JSON, based on the same abstract scengraph model
- Includes shaders, animation, interaction, geometry, texturing, lighting, camera
- Extensible - Capabilities added through scripting and node prototyping.

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# What is X3D (Extensible) 3D

- Large set of nodes for 3D modeling
- Profile and Component structure promotes interoperability
- Implementations on multiple platforms: desktop, mobile, Web
- Domain components - Design, 3D Printing, Medical, Geospatial, Humanoid Animation, AR and VR
- Multiple open source implementations (X3DOM and X-ite)

www.web3d.org/what-x3d

x3dom
Instant 3D the HTML way!

X-ite

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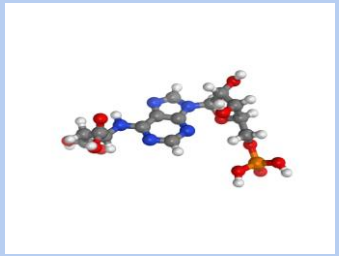
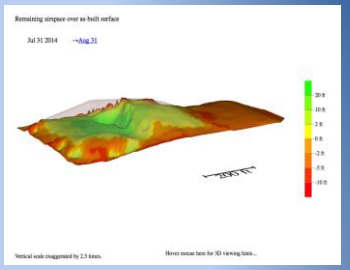
# Key Factors of durable X3D

- Long Term Stability
- Visualization
- Performance
- Intergation
- Data Management
- Real-time Interactivity
- Security
- Ease of Use





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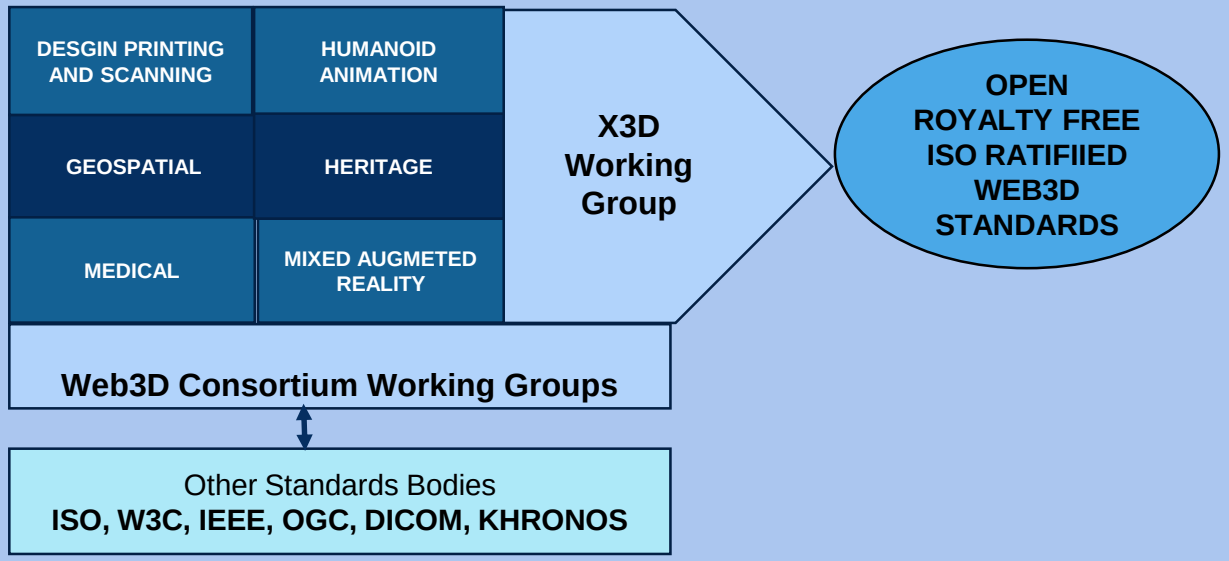
# Web3D: Working Groups Structure

- Domain Specific working groups provide recommendations to the X3D WG for ISO Ratification
- Working groups open to all members



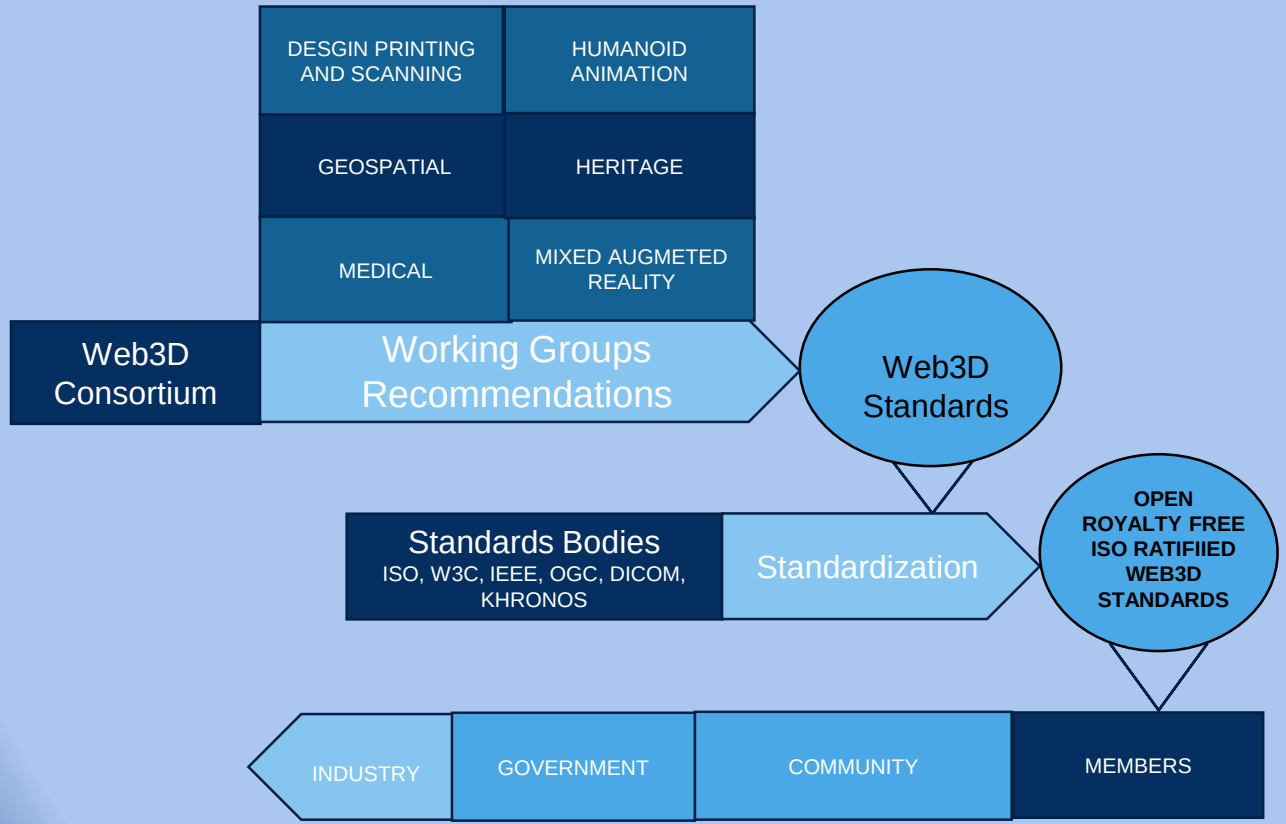

www.web3d.org/working-groups

# Interoperability

**Web3D Consortium has MOU and liaison agreements with several standards bodies to develop open interoperable 3D solutions**

**Converging with other standards**

# Bringing open Web3D Standards to ALL



# Web3D Consortium Membership

**Organization:**

| | |
|---|---|
| **Large** | **$9,500** |
| **Standard** | **$3,500** |
| **Small** | **$1,500** |

| | |
|---|---|
| **Professional** | **$100** |
| **Community** | **Free** |

**Membership Benefits:**

**www.web3d.org/join**

| Marketing | Business Opportunities | Drive Web3D Standards | Networking | Web3D Talent Bank |
|---|---|---|---|---|
| ▪ Promote products | ▪ Business partnership | ▪ Working Group participation | ▪ Industry Leaders | ▪ Access to Web3D experts |
| ▪ Conference participation | ▪ Joint grants | ▪ Early access to spec | ▪ Research experts | |
| ▪ Press partnership | | ▪ Board Seat | ▪ 3D companies | |
| | | ▪ Voting Rights | | |

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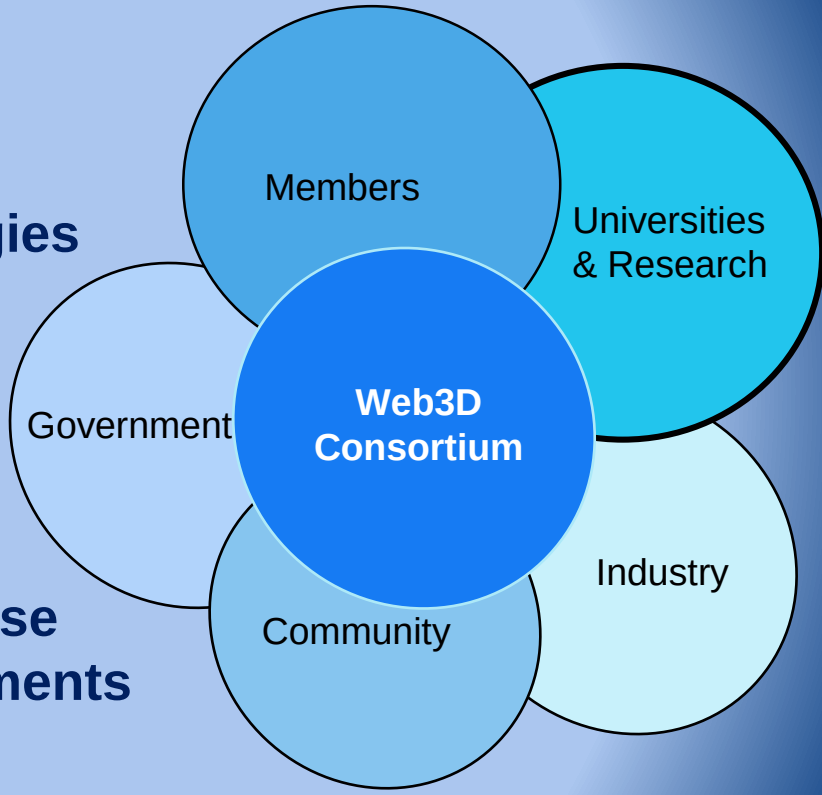
# Web3D Consortium Goals

**Evolve open Web3D based 3D technologies**

**Empower 3D/VR Developers**

**Guide Policy Makers**

**Encourage enterprises and industry to use open standards and protect their Investments**

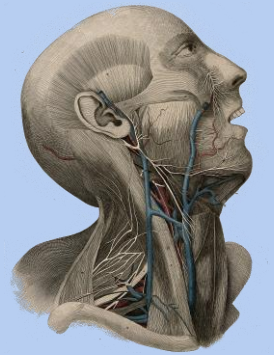


# X3D Capabilities

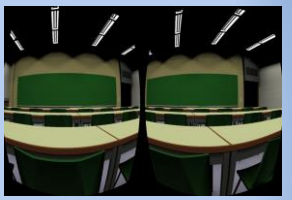
**Drilling Rig**
Animation, interaction, shadows, details

**High Poly, Progressive Loading**
Happy Buddha

**Volume Rendering**



**Oculus Support**
Classroom



**3D Printing**

NIH 3D PRINT EXCHANGE

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# We are laying the foundation

Geospatial
Medical
Design
3D Printing

Simulation
Humanoid Animation
VR Technologies
Augmented Reality

X3D: Your hub for rendering 3D data

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# Join the Web3D Team

**Web3D 2018 Conference**
**20-22 June 2018, Poznań, Poland**

**SIGGRAPH 2018**
**12-16 August, Vancouver, USA**

**Make open 3D standards work for you!**
**www.web3d.org/join**

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