# Web3D 2018
## June 20-22, 2018, Poznań, Poland

POZNAŃ UNIVERSITY OF ECONOMICS AND BUSINESS

# The 23rd International ACM Conference on 3D Web Technology

## 20-22 June 2018, Poznań, Poland

http://www.web3d2018.org/

ACMSIGGRAPH

web|3D CONSORTIUM

# CALL FOR PAPERS

**The 23rd International ACM Conference on 3D Web Technology** (Web3D 2018), organized in cooperation with the Web3D Consortium, will address an extensive range of research, development, and practice related to web-based interactive 3D applications. The goal of the conference is to share innovative and creative ideas that enable development of 3D applications for a wide range of 3D environments, including the web, mobile as well as virtual and augmented reality (VR & AR) setups. Works related to various application domains, including e-commerce, education, cultural heritage, entertainment and infotainment, social media, tourism, medicine, military, industry and construction (and many others) are welcome.

This year's theme **"3D Everywhere"** emphasizes the global scope and impact of current and future 3D technology. Web3D wants to foster and support the increasing development, use, and utility of 3D technologies for application developers, domain experts, as well as for end users. This includes the creation of interactive 3D content, robust and versatile 3D content representation and delivery standards, as well as presentation and interaction techniques enabling development of user-friendly 3D applications.

The main topics of the conference include, but are not limited to:

- Technologies and methods for WebVR, WebAR, and mixed reality
- Novel multi-modal 3D interaction paradigms, including spatial UI, gesture, and voice
- Online visualization and exploration, e.g., for sci-vis, info-vis, and 3D object repositories
- Novel 3D content creation and modelling techniques, tools, and workflows, including semantic and AI techniques
- Algorithms for shape modeling, compression, optimization, analysis, and processing
- 3D content acquisition, e.g., scanning, reconstruction, etc.
- Rendering of large-scale models, animations, and virtual worlds, including cloud-based rendering and other services
- Streaming, compression, and transmission of 3D content, in particular in mobile networks
- Collaboration in multi-user virtual environments
- Novel APIs, toolkits, and frameworks for 3D web and associated application domains
- Virtual humans, avatars, and complex reactive characters
- Motion capture for composition and streaming of behaviors and expressions
- Annotation, metadata, hyperlinking and semantic web for 3D objects and scenes
- Visual analytics based on 3D web technologies

- Diffusion and adoption of 3D web technologies
- Novel interactive 3D web applications in all areas and sectors, e.g., entertainment, education, training, cultural heritage, medicine, military, smart-manufacturing / industry 4.0, information visualization, scientific visualization, geo-visualization, building information modeling (BIM), and architecture.

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# Submissions

**PAPERS** presenting original work in 3D web **research** and **application** may be submitted in a long or short form (up to 9 or 4 pages). Submissions will be peer-reviewed. Accepted papers will be included in the **ACM Digital Library** and submitted to major indexing services, such as **Web of Science**, **DBLP**, and **Scopus**.

**POSTERS** present results of **ongoing** or **recently completed** work in 3D web research and application. The poster format offers the opportunity to interactively present and discuss interesting results to the Web3D community. Posters should be submitted in the form of **abstracts** (2 pages), which after acceptance will be published in the conference proceedings.

**TUTORIALS** are an opportunity to present introductory and advanced applications of 3D web technologies to students and to experienced practitioners. Tutorial subjects can include practices for authoring interactive 3D scenes and in using 3D graphics in diverse application areas. Especially welcome are tutorials in the use of open-source software and web applications, which can be presented in hands-on sessions at the conference.

**WORKSHOPS** provide a forum for researchers and practitioners from both the web and 3D multimedia communities to discuss and exchange positions on current and emergent 3D web topics. Workshops may take the form of presentation sessions moderated by workshop organizers or open discussions on a specific topic of interest.

**DEMONSTRATIONS** enable **artists**, **content designers**, and **developers** to share their innovative 3D works at the conference. Artworks and applications developed for various platforms, including the web, desktop, mobile and VR/AR systems, are welcome. Demonstrations should be submitted in the form of short descriptions (2 pages), which after acceptance may be published in the conference proceedings.

**INDUSTRIAL USE CASES** enable practitioners to demonstrate how 3D web technologies may be used in industrial applications. A special track during Web3D 2018 will be devoted to industrial use cases to share inspiration, best practice and requirements of using 3D in various application domains.

**COMPETITION (H-ANIM)** This annual competition is dedicated to showing how H-Anim and X3D graphics standards can be used for creating animated music videos. The competition is organized by the Korean Standards Association (KSA) and Web3D Consortium. For competitors, attendance at the conference is not mandatory, but is encouraged.

Questions about the program and conference topics can be sent to program@web3d2018.org.

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# Important dates

**Conference dates:** June 20-22, 2018
**Early registration:** May 1, 2018

**Paper/poster submission:** February 16, 2018
**Demonstration submission:** April 2, 2018
**Paper/poster/demo acceptance:** April 10, 2018
**Camera-ready paper/poster/demo:** April 25, 2018
**Tutorial/workshop submission:** March 2, 2018
**Tutorial/workshop acceptance:** April 2, 2018
**Industrial use cases submission:** May 1, 2018

**H-Anim competition:** April 2, 2018 (Winners will be announced at the Conference)

# Organizing Committee

**General Chairs**

*Krzysztof Walczak*, Poznań University of Economics and Business, Poland
*Gabriel Zachmann*, University of Bremen, Germany

**Program Chairs**

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**Demonstration Chairs**

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**Industrial Liaison Chairs**

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*Wiktoria Winkler*, Poznań University of Economics and Business, Poland

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Please visit the website for more opportunities, submission instruction, and information about the Web3D 2018 Conference: http://www.web3d2018.org/submissions