Dive Into AI, Avatars and the Metaverse With NVIDIA at SIGGRAPH

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Innovative technologies in AI, virtual worlds and digital humans are shaping the future of design and content creation across every industry. Experience the latest advances from NVIDIA in all these areas at SIGGRAPH, the world's largest gathering of computer graphics experts, running Aug. 8-11.

At the conference, creators, developers, engineers, researchers and students will see all the new tech and research that enables them to elevate immersive storytelling, build realistic avatars and create stunning 3D virtual worlds.

NVIDIA's special address on Tuesday, Aug. 9, at 9 a.m. PT will feature founder and CEO Jensen Huang, along with other senior leaders. Join to get an exclusive look at some of our most exciting work, from award-winning research to new AI-powered tools and solutions.

Discover the emergence of the metaverse, and see how users can build 3D content and connect photorealistic virtual worlds with NVIDIA Omniverse, a computing platform for 3D design collaboration and true-to-reality world simulation. See the advanced solutions that are powering these 3D worlds, and how they expand the realm of artistic expression and creativity.

NVIDIA is also presenting over 20 in-person sessions at SIGGRAPH, including hands-on labs and research presentations. Explore the session topics below to build your calendar for the event:

See how users can create assets and build virtual worlds for the metaverse using the power and versatility of Universal Scene Description (USD) with this presentation:

The Next Evolution of USD for Building Virtual Worlds. Learn about the importance of USD at this session on Wednesday, Aug. 10, at 1 p.m. PT. Get a look at a USD development roadmap from NVIDIA, and learn more about its recent USD projects and initiatives.

Find out how to accelerate complex 3D workflows and content creation for the metaverse. Discover groundbreaking ways to visualize, simulate and code with advanced solutions like NVIDIA Omniverse in sessions including:

Real-Time Collaboration in Ray-Traced VR . Discover the recent leaps in hardware architecture and graphics software that have made ray tracing at virtual-reality frame rates possible at this session on Monday, Aug. 8, at 5 p.m. PT.

Material Workflows in Omniverse . Learn how to improve graphics workflows with arbitrary material shading systems supported in Omniverse at this talk on Thursday, Aug. 11, at 9 a.m. PT.

Learn more about neural graphics — the unification of AI and graphics — which will make metaverse content creation available to everyone. From 3D assets to animation, see how AI integration can enhance results, automate design choices and unlock new opportunities for creativity in the metaverse. Check out the session below:

NVIDIA Instant NeRF – Getting Started with Neural Radiance Fields . Researchers will discuss how Instant NeRF can enhance 2D-to-3D visualization-development projects at this presentation on Tuesday, Aug. 9, at 3 p.m. PT.

Get insights on the latest technologies transforming industries, from cloud production to extended reality. Discover how leading film studios, cutting-edge startups and other graphics companies are building and supporting their technologies with NVIDIA solutions. Some must-see sessions include:

ILM Presents: Leveraging AI in Visual Effects and StageCraft Virtual Production. Hear how an Industrial Light & Magic team uses NVIDIA's powerful AI-enabled DeepSearch tool to search through its massive asset library. This presentation takes place on Monday, Aug. 8, at 4 p.m. PT.

The Future of Extended Reality: How Immersion Will Change Everything. Industry luminaries will discuss the technologies that are impacting the future of extended reality in this panel, which takes place on Tuesday, Aug. 9, at 10 a.m. PT.

Metaphysic: Creating Hyperreal Avatars and Synthetic Humans for Web3 and Feature Films . Jo Plaete, a world leader in creating hyperreal Al-generated content, will showcase some of the latest work undertaken by Al company Metaphysic in this presentation on Thursday, Aug. 11, at 1 p.m. PT.

SIGGRAPH registration is required to attend the in-person events. Sessions will also be available the following day to watch on demand from our site.

Many NVIDIA partners will attend SIGGRAPH, showcasing demos and presenting on topics such as AI and virtual worlds. Download this event map to learn more.

And tune into the global premiere of The Art of Collaboration: NVIDIA, Omniverse and GTC on Wednesday, Aug. 10, at 10 a.m. PT. The documentary shares the story of the engineers, artists and researchers who pushed the limits of NVIDIA GPUs, AI and Omniverse to deliver the stunning GTC keynote last spring.

Join NVIDIA at SIGGRAPH to learn more, and watch NVIDIA's special address to hear the latest on graphics, AI and virtual worlds.

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