



# Virtual Assistants and Digital Humans on Pace to Ace Turing Test With New NVIDIA Omniverse Avatar Cloud Engine

## Omniverse ACE Offers Developers of Games, Chatbots, Digital Twins, Virtual Worlds a Suite of Cloud-Native AI Models to Build and Deploy Interactive Avatars

NVIDIA today announced [NVIDIA Omniverse Avatar Cloud Engine \(ACE\)](#), a suite of cloud-native AI models and services that make it easier to build and customize lifelike virtual assistants and digital humans.

By bringing these models and services to the cloud, ACE enables businesses of any size to instantly access the massive computing power needed to [create and deploy assistants and avatars](#) that understand multiple languages, respond to speech prompts, interact with the environment and make intelligent recommendations.

“Our industry has been on a decades-long journey teaching computers to communicate and carry out complex tasks with ease that humans take for granted,” said Rev Lebedian, vice president of Omniverse and simulation technology at NVIDIA. “NVIDIA ACE brings this within reach. ACE combines many sophisticated AI technologies, allowing developers to create digital assistants that are on a path to pass the Turing test.”

ACE is built on top of [NVIDIA’s Unified Compute Framework](#), which provides access to the rich software tools and APIs needed to harness the wide range of skills needed for highly realistic, fully interactive avatars. These include [NVIDIA Riva](#) for developing speech AI applications, [NVIDIA Metropolis](#) for computer vision and intelligent video analytics, [NVIDIA Merlin™](#) for high-performing recommender systems, [NVIDIA NeMo Megatron](#) for large language models with natural language understanding, and [NVIDIA Omniverse](#) for AI-enabled animation.

The assistants and avatars ACE enables will transform interactions in gaming, entertainment, banking, transportation and hospitality.

Two applications built on ACE include NVIDIA’s [Project Maxine](#) and [Project Tokkio](#). Project Maxine brings state-of-the-art video and audio features to virtual collaboration and content creation applications. Project Tokkio enables interactive avatars that see, perceive, converse intelligently and provide recommendations to enhance customer service in places like restaurants.

### Omniverse ACE Support

Developers of virtual assistants and digital humans plan to use ACE to accelerate their avatar development efforts.

“Reallusion developers can build convincing characters quickly and easily, and now we step forward with the latest advancements in artificial intelligence and real-time rendering,” said Elvis Huang, head of innovation in the Innovation Development Department at Reallusion, Inc. “Pairing our Character Creator and iClone tools with NVIDIA’s Omniverse Avatar Cloud Engine will be a great way to create lifelike avatars that interact with end users realistically.”

“Demand for digital humans and virtual assistants continues to grow exponentially across industries, but creating and scaling them is getting increasingly complex,” said Kevin Krewell, principal analyst at TIRIAS Research. “NVIDIA’s Omniverse Avatar Cloud Engine brings together all of the AI cloud-based microservices needed to more easily create and deliver lifelike, interactive avatars at scale.”

Learn more about [Omniverse Avatar Cloud Engine](#).

### About NVIDIA

Since its founding in 1993, [NVIDIA](#) (NASDAQ: NVDA) has been a pioneer in accelerated computing. The company’s invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined computer graphics and ignited the era of modern AI. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry. More information at <https://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: the benefits, impact, performance, and abilities of our products and technologies, including NVIDIA Omniverse Avatar Cloud Engine; digital assistants being on a path to pass the Turing test with ACE; the assistants and avatars ACE enables transforming interactions in gaming, entertainment, banking, transportation and hospitality; developers of virtual assistants and digital humans planning to use ACE to accelerate their avatar development efforts; and demand for digital humans and virtual assistants continuing to grow exponentially across industries are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially

include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the most recent reports NVIDIA files with the Securities and Exchange Commission, or SEC, including, but not limited to, its annual report on Form 10-K and quarterly reports on Form 10-Q. Copies of reports filed with the SEC are posted on the company's website and are available from NVIDIA without charge. These forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, NVIDIA disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

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