

# NVIDIA Releases Digital Human Microservices, Paving Way for Future of Generative AI Avatars

**NVIDIA ACE Now Generally Available for Cloud, in Early Access for RTX AI PCs, in Use by Companies Across Customer Service, Gaming and Healthcare, Including Dell Technologies, ServiceNow, Aww Inc., Inventec, Perfect World Games**

**COMPUTEX**—NVIDIA today announced the [general availability](#) of NVIDIA ACE generative AI microservices to accelerate the next wave of digital humans, as well as new generative AI breakthroughs coming soon to the platform.

Companies in customer service, gaming and healthcare are the first to adopt ACE technologies to simplify creating, animating and operating lifelike digital humans across customer service, telehealth, gaming and entertainment.

The suite of [NVIDIA ACE](#) digital human generative AI technologies now generally available includes:

- [NVIDIA Riva ASR, TTS and NMT](#) — for automatic speech recognition, text-to-speech conversion and translation
- [NVIDIA Nemotron LLM](#) — for language understanding and contextual response generation
- [NVIDIA Audio2Face™](#) — for realistic facial animation based on audio tracks
- [NVIDIA Omniverse RTX](#) — for real-time, path-traced realistic skin and hair

Newly announced technologies include:

- [NVIDIA Audio2Gesture™](#) — for generating body gestures based on audio tracks, available soon
- [NVIDIA Nemotron-3 4.5B](#) — a new small language model (SLM) purpose-built for low-latency, on-device RTX AI PC inference

“Digital humans will revolutionize industries,” said Jensen Huang, founder and CEO of NVIDIA. “Breakthroughs in multi-modal large language models and neural graphics — delivered by NVIDIA ACE to our ecosystem of developers — are bringing us closer to a future of intent-driven computing, where interacting with computers is as natural as interacting with humans.”

## Digital Humans Come to 100 Million RTX AI PCs

To date, NVIDIA has provided ACE as [NVIDIA NIM™ microservices](#) for developers to operate in data centers. Now NVIDIA is building [ACE PC NIM microservices](#) for deployment across the installed base of 100 million RTX AI PCs and laptops.

These include NVIDIA Nemotron-3 4.5B, the company’s first SLM, which has been purpose-built to run on device with similar levels of precision and accuracy as large language models (LLMs) running in the cloud. Nemotron-3 4.5B SLM is now in early access. NVIDIA Audio2Face and NVIDIA Riva ASR on-device models will be available soon in [early access](#).

The new [NVIDIA AI Inference Manager](#) software development kit simplifies the deployment of ACE to PCs. It preconfigures the PC with the necessary AI models, engines and dependencies while orchestrating AI inference seamlessly across PCs and the cloud.

An updated version of the [Covert Protocol tech demo](#), developed in collaboration with [Inworld AI](#), is being shown at the COMPUTEX trade show. Using Audio2Face and Riva ASR running [locally on GeForce RTX™ PCs](#), the demo allows players to interact and influence digital-human non-playable characters (NPCs) with conversational language to complete their mission.

## Digital Human Ecosystem Expands With Latest ACE Technologies

ACE is making waves with developers building a variety of applications from companies such as Aww Inc., Dell Technologies, [Gumption](#), Hippocratic AI, Inventec, [OurPalm](#), Perfect World Games, Reallusion, ServiceNow, Soulbotix, SoulShell and [UneeQ](#).

Aww Inc., a pioneering virtual human company based in Japan, launched its first virtual celebrity, Imma, in 2018. Imma has since become the face of major global brands in more than 50 countries. Now, Aww Inc. plans to leverage ACE Audio2Face microservices for real-time animation, enabling a highly interactive communication experience with its users.

Perfect World Games, a game developer and publisher, is adopting ACE in its new mythological wilderness tech demo, Legends. Players can interact with a fully interactive, realistic, multilingual, AI NPC in both English and Mandarin. Using NVIDIA Audio2Face NIM, the character’s audio responses generate realistic facial animation in real time.

Inventec, a major technology company that is investing heavily in AI, is using NVIDIA Audio2Face NIM to enhance its healthcare AI agent within the VRSTATE platform. The integration provides a more engaging, comforting virtual consultation

experience. At COMPUTEX, Inventec is showcasing an AI agent that can help patients access information about their health.

[ServiceNow](#), the AI platform for business transformation, [recently showcased ACE NIM](#) in a generative AI service agent demo for its Now Assist Gen AI Experience, highlighting the potential for digital avatars to enhance customer and employee interactions across industries including retail, travel and more.

Dell Technologies unveiled its cutting-edge Dell Generative AI Solution for Digital Assistants at [Dell Technologies World](#) last month. The offering allows businesses to leverage intelligent digital assistants that engage customers through natural conversations across various industries such as retail, healthcare and customer service.

### **NVIDIA Celebrates Digital Human Startups at COMPUTEX 2024**

NVIDIA art teams used generative AI tools built on ACE, including [Synthesia](#) and [Hour One](#), to produce a “digital Jensen” avatar that was generated by video from text.

The multilingual avatar featured Huang’s unique voice and style, generated by [ElevenLabs](#)’ proprietary AI speech and voice technology in Mandarin Chinese and English. NVIDIA also collaborated with Voicemod, an NVIDIA Inception member specializing in AI voice technology, to compose the [ending theme song](#) of Huang’s keynote.

### **ACE NIM Now Available**

NVIDIA ACE NIM microservices for server deployments including Riva and Audio2Face are now in production, adding [NVIDIA AI Enterprise](#) software for developers to receive enterprise-class support. Register for [early access](#) to ACE NIM microservices that run on RTX AI PCs.

Watch [Huang’s COMPUTEX keynote](#) to see the latest in ACE content.

### **About NVIDIA**

[NVIDIA](#) (NASDAQ: NVDA) is the world leader in accelerated computing.

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