Ansys and NVIDIA Pioneer Next Era of Computer-Aided Engineering

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Expanded collaboration will drive the future of simulation powered by accelerated computing and generative AI

/ **Key Highlights**

- Ansys will collaborate with NVIDIA on accelerated computing, advancing 6G communication systems, artificial intelligence (AI)-infused simulation solutions, autonomous vehicles, digital twins, enhanced graphics, and visual rendering
- Ansys joins the Alliance for OpenUSD (AOUSD) to foster data interoperability of 3D content in products across the Ansys portfolio
- NVIDIA will expand its use of Ansys solutions to optimize hardware while Ansys will use NVIDIA Blackwell GPUs, Hopper architecture-based GPUs and GB200 Grace Blackwell Superchips to scale up and accelerate existing solutions

PITTSBURGH, March 18, 2024 /PRNewswire/ -- Ansys (NASDAQ: ANSS) today announced a collaboration with NVIDIA to develop next-generation simulation solutions powered by accelerated computing and generative AI. The expanded collaboration will fuse cutting-edge technologies to advance 6G technologies, supercharge Ansys solvers via NVIDIA GPUs, integrate NVIDIA AI into Ansys software offerings, develop physics-based digital twins, and customize large language models (LLMs) developed with NVIDIA AI foundry services.

Ansys recently joined the AOUSD to strengthen data interoperability and deliver enhanced graphics and visual rendering to its portfolio. Ansys has already connected Ansys AVxcelerate Autonomy ™ to NVIDIA DRIVE Sim powered by the NVIDIA Omniverse platform, and plans to investigate additional integrations across the portfolio, including Ansys STK ™, Ansys LS-DYNA ™, Ansys Fluent ™, and Ansys Perceive EM. This seamless interoperability will empower users to tackle a wide range of challenges, from factory-level to planetary-level simulations.

In addition to Omniverse integrations, the collaboration will prioritize advancements in four areas:

- **Accelerated Computing**: Ansys, working with NVIDIA, is enabling customers across industries to shorten design cycles and deliver increasingly complex products by advancing numerics research in high-performance computing. Ansys harnesses NVIDIA H100 Tensor Core GPUs to boost multiple simulation solutions and prioritizes NVIDIA Blackwell-based processors and NVIDIA Grace Hopper Superchips for products across the Ansys portfolio, including Ansys Fluent, Ansys LS-Dyna, and Ansys electronics and semiconductor products. Simultaneously, NVIDIA leverages Ansys technology, including semiconductor tools, to enrich virtual models and data center design, ultimately leading to accelerated Ansys solver performance.
- **6G Telecommunications:** Ansys is among the first adopters of the NVIDIA 6G Research Cloud platform, allowing researchers a comprehensive suite to advance AI for radio access network (RAN) technology. Ansys Perceive EM, a new solver powered by Ansys HFSS ™, builds on NVIDIA 6G Research Cloud, which is designed to speed the development of 6G technologies. Perceive EM's synthetic data-on-demand revolutionizes 6G system digital twins with elevated predictive accuracy, capable of assessing how real-world conditions impact wireless network performance. Perceive EM will also be available within the Ansys Academic and Ansys Startup Programs, which have reached 2,900+ universities and 2,100+ startups, respectively.
- **AI-Enhanced Simulation**: Ansys is exploring the NVIDIA Modulus framework for physics-based machine learning to further boost its software offerings with the latest AI techniques. The work aims to deliver enhanced functionality within the Ansys AI+ product family, such as more efficient optimization, sensitivity analyses, and robust designs.

- **AI Foundry**: Ansys is examining the adoption of NVIDIA AI foundry to advance LLM development, furthering the democratization of simulation by simplifying setup and use. Future LLMs tailored to Ansys solutions offer the potential to provide expert virtual assistance that will open the door to new users and create new simulation use cases. Ansys intends to leverage the NVIDIA NeMo platform, which offers a set of tools that make it easier, more cost-effective, and faster to develop generative AI capabilities.

"We are excited to extend our collaboration with NVIDIA to enable a new frontier of generative AI and accelerated computing," said Ajei Gopal, president and CEO at Ansys. "Within the dynamic realm of NVIDIA Omniverse, our visionary customers can propel innovation, bridging virtual and physical realities to shape tomorrow's technologies and help solve the most pressing engineering challenges of our time."

"Everything manufactured will have digital twins — and the world's designers and engineers in heavy industry markets rely on Ansys as their simulation engine," said Jensen Huang, founder and CEO of NVIDIA. "We're collaborating with Ansys to bring accelerated computing and generative AI to these massive workloads, and to extend Ansys' leading physics simulation tools with NVIDIA Omniverse digitalization technologies."

Join Ansys at NVIDIA GTC, Booth #830, to learn more about the future of generative AI and see exciting demonstrations.

/ About Ansys

Our Mission: Powering Innovation that Drives Human Advancement ™

When visionary companies need to know how their world-changing ideas will perform, they close the gap between design and reality with Ansys simulation. For more than 50 years, Ansys software has enabled innovators across industries to push boundaries by using the predictive power of simulation. From sustainable transportation to advanced semiconductors, from satellite systems to life-saving medical devices, the next great leaps in human advancement will be powered by Ansys.

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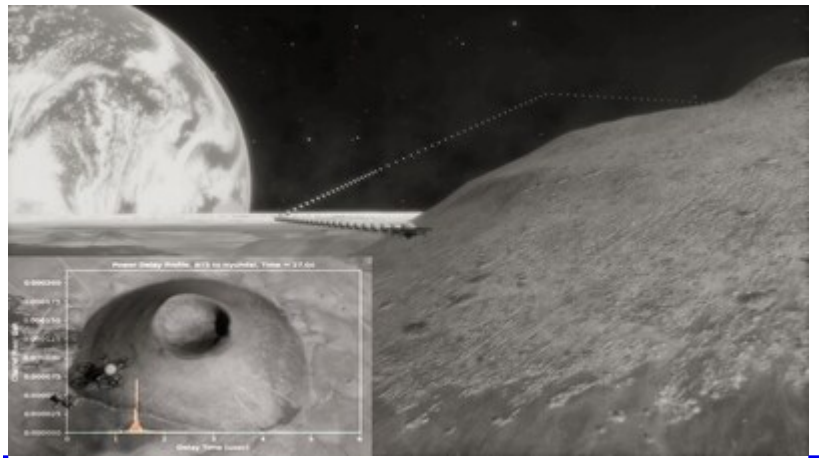

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