GE HealthCare introduces advanced imaging solutions powered by NVIDIA technology to support timely diagnoses and streamlined clinical workflows

December 2, 2025

- NVIDIA technology is now integrated into several of GE HealthCare's new imaging solutions, including Photonova Spectra[1], SIGNA Sprint with Freelium[2], SIGNA Bolt[3], Vivid Pioneer, and Pristina Recon DL.
- At RSNA 2025, GE HealthCare is also gathering feedback on early-stage exploratory workflow concepts[4] within ultrasound and X-ray that incorporate autonomous technologies for continued research and development.

CHICAGO--(BUSINESS WIRE)--Dec. 2, 2025-- At the Radiological Society of North America (RSNA) 2025 Annual Meeting, GE HealthCare (Nasdaq: GEHC) is showcasing several innovations brought to life through an expanded collaboration with NVIDIA. This collaboration underscores GE HealthCare's ongoing commitment to integrating advanced technologies that aim to transform healthcare delivery and improve patient care. The company is leveraging NVIDIA's offerings and expertise in areas of physical AI, high performance computing, and simulation, which has the potential to reduce manual tasks, increase patient comfort, and alleviate radiologist burnout through AI-powered assistance.

GE HealthCare and NVIDIA are working together to address some of the most pressing challenges in medical imaging and diagnostics with solutions that aim to shorten scan times, enhance diagnostic clarity, and improve clinical workflows. This is especially urgent given that approximately 30% of the world's data is generated by the healthcare industry [5], yet healthcare systems only use about 3% of it due to fragmented systems and inefficient workflows.[6] As highlighted at RSNA this year, this collaboration is powering next-generation solutions across modalities—from CT and PET, to cardiac, mammography, and ultrasound systems—by integrating NVIDIA's full-stack accelerated computing platforms to process large, complex datasets with speed and precision.

"We are redefining diagnostic imaging by fusing GE HealthCare's deep clinical expertise and imaging innovation with NVIDIA's edge AI and accelerated computing platforms," said Roland Rott, President and CEO, Imaging, GE HealthCare. "With co-development efforts spanning simulation, segmentation, and real-time image reconstruction, and a joint go-to-market strategy underway, this alliance enables us to drive scalable innovation across the continuum of care. Together, we are creating a future of smarter, faster, and more autonomous imaging workflows."

"A future where medical imaging devices are intelligent and robotic has the potential to expand the scale and reach of diagnostic imaging to more places and more patients than ever before," said Kimberly Powell, Vice President of Healthcare at NVIDIA. "Together with GE HealthCare, we're reimagining how imaging systems are built, deployed, and enhanced—in order to create smarter scans and faster workflows which could improve diagnoses and treatments for patients globally."

Key GE HealthCare innovations leveraging NVIDIA's technology include:

- **Vivid™ Pioneer** This innovation is GE HealthCare's most advanced, ultra-premium and adaptive cardiovascular ultrasound system yet. The ultrasound system is designed to support clinicians with extraordinary imaging in 2D, 4D and color flow, streamlined workflow, and enhanced diagnostic confidence. Vivid Pioneer utilizes two professional grade NVIDIA GPUs – dedicated to advanced image reconstruction, processing, AI, and visualization. The result is exceptional imaging performance and diagnostic accuracy for enhanced clinical decisions.
- **Pristina™ Recon DL** This solution is GE HealthCare's advanced 3D mammography reconstruction technology — the first to combine deep learning with ASIR reconstruction—that provides outstanding digital breast tomosynthesis (DBT) image quality at a low patient radiation dose. The system is designed to support clinicians with 2D synthetic, 3D slabs and volumes, with streamlined workflow and enhanced diagnostic confidence. Pristina Recon DL utilizes NVIDIA's accelerated computing technology to execute its advanced image reconstruction, delivering fast and accurate images in the exam room and for clinical diagnosis.

Innovations unveiled at RSNA 2025 [510(k) pending at the U.S. FDA. Not available for sale.]:

- **Photonova Spectra ™ Photon Counting CT (PCCT)**[7,8]: Shown for the first time at RSNA, the new imaging solution aims to transform CT imaging with the world's first Deep Silicon photon counting technology, designed to deliver remarkable spectral and spatial resolution, seeking to enable clinicians to see more, know more, and achieve more across the clinical spectrum. This system, which leverages NVIDIA's latest accelerated computing technology and CUDA libraries, is designed to process up to 50 times more data than standard CT systems and seeks to provide fast and precise outputs supporting diagnostic confidence.
- **SIGNA™ Sprint with Freelium**[9]: This innovative technology aims to reimagine 1.5T MRI by combining exceptional helium-free[10] sustainability, high fidelity image quality, and intelligent automation — designed to deliver everyday diagnostic excellence. GE HealthCare utilizes NVIDIA GPU-accelerated platforms to accelerate the development of deep learning-based reconstruction models.
    - On the MR scanner itself, the NVIDIA Triton Inference Server powers advanced deep learning inference, enabling

fast, efficient image reconstruction.
    - The combination of NVIDIA's cutting-edge hardware and CUDA software allows GE HealthCare to deliver fast processing times with impressive image quality, aiming to help clinicians make quick, confident diagnostic decisions.
- **SIGNA™ Bolt**[11]**:** GE HealthCare is also unveiling its most advanced 3.0T MRI system — combining ultra-high gradient performance, intelligent digital radio frequency (RF) architecture, and sustainable design which together aim to deliver sharp imaging, fast workflows, and seamless clinical-to-research flexibility, all with exceptionally low energy consumption and operational costs. Powered by NVIDIA's GPU-accelerated processing, SIGNA Bolt is designed to provide real-time image enhancement, fast scans, and enhanced efficiency — with the goal of precise MRI diagnostics supporting patient care.
    - SIGNA Bolt also leverages **SONIC DL**, which uses NVIDIA Triton Inference Server. Sonic DL provides up to 12 times acceleration and more than 80% scan time reduction, enabled by a deep learning-based reconstruction algorithm.

Concepts in development:

In March, GE HealthCare and NVIDIA announced their intent to explore autonomous X-ray and autonomous ultrasound solutions aiming to bring even greater efficiencies to healthcare providers. This autonomous imaging initiative aims to leverage NVIDIA Isaac™ for Healthcare—an AI robotics development platform tailored for medical environments—together with NVIDIA Holoscan, a real-time edge AI computing platform designed for autonomous ultrasound systems. The future goal is for these capabilities to be deployed at the edge, close to existing medical devices, on a range of NVIDIA hardware platforms to help automate parts of the workflow. The autonomous vision is to streamline workflows by helping accelerate diagnostic turnaround, which can support expanding access to care to underserved areas. At RSNA 2025, GE HealthCare will seek feedback for potential concepts that incorporate autonomous x-ray and ultrasound technology through limited, early-stage exploratory demonstrations.[12]

"We're proud to be strengthening our long-standing relationship with NVIDIA and to make meaningful strides toward the future of intelligent imaging," said Philip Rackliffe, President and CEO, Advanced Visualization Solutions, GE HealthCare. "By integrating NVIDIA's full-stack platform, we're advancing the technologies needed for autonomous X-ray and ultrasound imaging. These innovations in development bring us closer to scalable, AI-powered imaging that supports clinicians, aims to improve patient outcomes, and helps expand access to high-quality care with speed and efficiency."

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[1] Photonova Spectra is 510(k)-pending with the U.S. FDA. Not CE Marked. Not available for sale in the United States, Europe, Canada, or any other region.

[2] SIGNA Sprint with Freelium is a configuration of SIGNA Sprint Select. SIGNA Sprint Select is 510(k) pending at U.S. FDA. Not CE marked. Not available for sale.

[3] SIGNA Bolt is 510(k) pending at U.S. FDA. Not CE marked. Not available for sale.

[4] Concept only. May never become a product. Not for Sale. Not cleared or approved by the U.S. FDA or any other global regulator for commercial availability.

[5] RBC Capital Markets. (n.d.). The healthcare data explosion. RBC Capital Markets. https://www.rbccm.com/en/gib/healthcare/episode/the_healthcare_data_explosion

[6] World Economic Forum. (2024, January 5). How to harness health data to improve patient outcomes. World Economic Forum. https://www.weforum.org/stories/2024/01/how-to-harness-health-data-to-improve-patient-outcomes-wef24/

[7] When compared to Revolution Apex Elite.

[8] Photonova Spectra is 510(k)-pending with the U.S. FDA. Not CE Marked. Not available for sale in the United States, Europe, Canada, or any other region.

[9] SIGNA Sprint with Freelium is a configuration of SIGNA Sprint Select. SIGNA Sprint Select is 510(k) pending at U.S. FDA. Not CE marked. Not available for sale.

[10] Helium is permanently enclosed in the magnet. 1% helium compared to conventional magnets.

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About GE HealthCare Technologies Inc.
GE HealthCare is a trusted partner and leading global healthcare solutions provider, innovating medical technology, pharmaceutical diagnostics, and integrated, cloud-first AI-enabled solutions, services and data analytics. We aim to make hospitals and health systems more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 125 years, GE HealthCare is advancing personalized, connected and compassionate care, while simplifying the patient's journey across care pathways. Together, our Imaging, Advanced Visualization Solutions, Patient Care Solutions and Pharmaceutical Diagnostics businesses help improve patient care from screening and diagnosis to therapy and monitoring. We are a $19.7 billion business with approximately 53,000 colleagues working to create a world where healthcare has no limits.

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