Medtronic and NVIDIA Collaborate to Build AI Platform for Medical Devices

Integrating NVIDIA Technology Into Medtronic’s Real-Time AI Endoscopy Device to Help Improve Patient Care and Outcomes

GTC—NVIDIA today announced that it is collaborating with Medtronic, the world’s largest healthcare technology provider, to accelerate the development of AI in the healthcare system and bring new AI-based solutions into patient care.

The companies will integrate NVIDIA healthcare and edge AI technologies into Medtronic’s GI Genius™ intelligent endoscopy module, developed and manufactured by Cosmo Pharmaceuticals. GI Genius is the first FDA-cleared, AI-assisted colonoscopy tool to help physicians detect polyps that can lead to colorectal cancer.

GI Genius has been designed to host a suite of AI algorithms and integrating the NVIDIA Clara™ healthcare platform could allow Medtronic to scale development of algorithms for real-time procedures, potentially accelerating AI innovation for better patient care.

“Artificial intelligence is a powerful tool that can increase the speed, efficiency and effectiveness of global health systems,” said Kimberly Powell, vice president of healthcare at NVIDIA. “We’re collaborating with Medtronic to accelerate AI innovation by enabling a software-defined business model, with the goal of improving clinical decision making, reducing medical variability and driving better patient outcomes.”

“We believe that collaborating with AI companies and developers like NVIDIA and Cosmo is essential to driving innovation within the medical device industry,” said Giovanni Di Napoli, president of Gastrointestinal Business at Medtronic. “We are committed to working with the best and brightest minds in the field of AI to develop new technologies that can improve patient outcomes and transform the way we approach healthcare.”

Medtronic intends to integrate NVIDIA Holoscan — a real-time AI computing software platform for building medical devices — and NVIDIA IGX, an industrial-grade edge AI hardware platform, to run with its GI Genius AI-assisted colonoscopy system to support physicians with AI-enhanced diagnostic images. Holoscan helps bring the latest AI applications into clinical settings by providing the full-stack infrastructure needed for scalable, software-defined processing of streaming data at the edge.

The NVIDIA Holoscan and IGX platform makes software-defined medical devices possible by enabling developers to efficiently train and validate AI models within the Cosmo Innovation Center, and then host the AI-powered applications on Medtronic’s GI Genius AI Access™ Platform, a marketplace for software-as-a-medical-device (SaMD) applications.

The first GI Genius systems built with the NVIDIA technology will be available later this year.

Watch NVIDIA founder and CEO Jensen Huang discuss the Medtronic collaboration in his GTC keynote.

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, ignited the era of modern AI and is fueling the creation of the metaverse. 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, and availability of our products and technologies, including NVIDIA Clara; NVIDIA Holoscan, and NVIDIA IGX; our collaboration with Medtronic and the benefits and impact thereof; and the potential of artificial intelligence to increase the speed, efficiency and effectiveness of global health system 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.