NVIDIA and HP Supercharge Data Science and Generative AI on Workstations

Coming to Z by HP AI Studio, NVIDIA CUDA-X Data Processing Libraries Boost Python Pandas Software for Millions of Data Scientists

HP Amplify — NVIDIA and HP Inc. today announced that NVIDIA CUDA-X™ data processing libraries will be integrated with HP AI workstation solutions to turbocharge the data preparation and processing work that forms the foundation of generative AI development.

Built on the NVIDIA CUDA® compute platform, CUDA-X libraries speed data processing for a broad range of data types, including tables, text, images and video. They include the NVIDIA RAPIDS™ cuDF library, which accelerates the work of the nearly 10 million data scientists using pandas software by up to 110x using an NVIDIA RTX™ 6000 Ada Generation GPU instead of a CPU-only system, without requiring any code changes.

RAPIDS cuDF and other NVIDIA software will be available as part of Z by HP AI Studio on HP AI workstations to provide a full-stack development solution that speeds data science workflows.

“Pandas is the essential tool of millions of data scientists processing and preparing data for generative AI,” said Jensen Huang, founder and CEO at NVIDIA. “Accelerating pandas with zero code changes will be a massive step forward. Data scientists can process data in minutes rather than hours, and wrangle orders of magnitude more data to train generative AI models.”

“Data science provides the foundation for AI, and developers need fast access to software and systems to power this critical work,” said Enrique Lores, president and CEO of HP Inc. “With the integration of NVIDIA AI software and accelerated GPU compute, HP AI workstations provide a powerful solution for our customers.”

NVIDIA CUDA-X Speeds Data Science on HP Workstation Solutions

Pandas provides a powerful data structure, called DataFrames, which lets developers easily manipulate, clean and analyze tabular data.

The NVIDIA RAPIDS cuDF library accelerates pandas so that it can run on GPUs with zero code changes, rather than relying on CPUs, which can slow workloads as data size grows. RAPIDS cuDF is compatible with third-party libraries and unifies GPU and CPU workflows so data scientists can develop, test and run models in production seamlessly.

As datasets continue to grow, RTX 6000 Ada Generation GPUs provide 48GB of memory per GPU to process large data science and AI workloads on Z by HP workstations. With up to four RTX 6000 GPUs, the HP Z8 Fury is one of the world’s most powerful workstations for AI creation. The close collaboration between HP and NVIDIA allows data scientists to streamline development by working on local systems to process even large generative AI workloads.

Availability

NVIDIA RAPIDS cuDF for accelerated pandas with zero code changes is expected to be available on HP AI workstation solutions with NVIDIA RTX and GeForce RTX GPUs this month and on HP AI Studio later this year.

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 industrial digitalization across markets. NVIDIA is now a full-stack computing infrastructure 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 performance of NVIDIA’s products, services, and technologies, including NVIDIA CUDA-X data processing libraries, NVIDIA CUDA, NVIDIA RAPIDS cuDF, NVIDIA RTX 6000 Ada Generation GPU and NVIDIA RTX and GeForce RTX GPUs; the benefits and impact of NVIDIA’s collaboration with HP Inc., and the features and availability of its services and offerings; pandas being the essential tool of millions of data scientists processing and preparing data for generative AI; accelerating pandas with zero code changes being a massive step forward; and the ability of data scientists to process data in minutes rather than hours, and wrangle orders of magnitude more data to train generative AI models 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
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