

World's Largest Genomics Institute Announces Affordable, Cloud-Based DNA Sequencing Service Accelerated by NVIDIA GPUs

BGI's EasyGenomics Service Brings Era of Affordable, Personalized Medicine a Step Closer to Reality

BOSTON, MA -- Bio-IT World 2012 -- NVIDIA today announced that <u>BGI</u>, the world's largest genomics institute, is launching a service that will enable researchers worldwide to perform affordable next-generation sequencing (NGS) <u>bioinformatics analysis</u> in the cloud.

The new "EasyGenomics" service from Shenzhen, China-based BGI combines an intuitive user interface with BGI's automated pipeline analysis, software and tools. These are integrated with the industry's largest sequencing platform to provide everything biologists, bioinformaticists and, ultimately, physicians need to submit and receive an automated analysis of DNA sequencing data.

Accelerated by NVIDIA GPUs, which speed the processing of the analysis of DNA big data from days to hours compared with a CPU-based system, EasyGenomics dramatically expands the availability of advanced genomics research capabilities to researchers around the world, bringing science closer to an era of affordable and viable personalized medicine.

BGI is launching a limited free trial of the new service today for qualified biologists and bioinformaticists at the 2012 Bio-IT World Conference and Expo. To learn more or to apply, visit the EasyGenomics website.

"By enabling larger numbers of researchers to accelerate DNA sequencing data more easily and affordably, we hope to help facilitate the use of genomics for clinical diagnostics as a practical component of health care, as well as for complex disease research," said Dr. Lin Fang, vice president at BGI. "GPU acceleration enables scientists to analyze DNA sequencing data faster than was ever possible, reducing the time from five days to just five hours. Once fully deployed in the cloud, we anticipate EasyGenomics could one day revolutionize genomics research."

The EasyGenomics cloud service features hybrid computing systems powered by NVIDIA® Tesla® M2070 and M2075 GPUs, which accelerate the DNA sequencing data analysis in conjunction with system CPUs. BGI plans to upgrade the EasyGenomics service with hundreds of additional NVIDIA Tesla GPUs when it is fully deployed, at which time it is expected to support thousands of users.

"This could be the year of the \$1,000 genome due to rapid decline in sequencing costs. We will soon be drowning in a deluge of data from the genome sequencers," said Sumit Gupta, senior director of the Tesla business at NVIDIA. "BGI's EasyGenomics service uses the power of GPU computing to provide an affordable and easy-to-use method for scientists to crunch through this new genomics big data problem and get us that much closer to effective and affordable individualized treatments."

BGI does groundbreaking work in genomic sequencing of a wide range of life forms -- ranging from plants and E. coli to the giant panda -- to develop better medicines, improve healthcare and develop genetically enhanced food. Headquartered in Shenzhen, China, with affiliates in Cambridge, Mass., and Copenhagen, Denmark, BGI's goal is to make leading-edge genomic science highly accessible. More information about BGI is available at www.en.genomics.cn.

About NVIDIA Tesla GPUs

NVIDIA Tesla GPUs are massively parallel accelerators based on the NVIDIA CUDA® parallel computing platform. Tesla GPUs are designed from the ground up for power-efficient, high performance computing, computational science and supercomputing, delivering dramatically higher application acceleration for a range of scientific and commercial applications than a CPU-only approach. Today, Tesla GPUs power three of the world's top five supercomputers.

More information about NVIDIA Tesla GPUs is available at the <u>Tesla website</u>. To learn more about CUDA or download the latest version, visit the <u>CUDA website</u>. More NVIDIA news, company and product information, videos, images and other information is available at the <u>NVIDIA newsroom</u>. You can also follow us on <u>Twitter (@NVIDIATesla)</u>.

About NVIDIA

NVIDIA (NASDAQ: NVDA) awakened the world to computer graphics when it invented the GPU in 1999. Today, its <u>processors</u> power a broad range of products from <u>smartphones</u> to <u>supercomputers</u>. NVIDIA's <u>mobile processors</u> are used in <u>cell phones</u>, <u>tablets</u> and <u>auto infotainment systems</u>. <u>PC gamers</u> rely on GPUs to enjoy spectacularly immersive worlds. Professionals use them to create <u>3D graphics</u> and visual effects in movies and to design everything from golf clubs to jumbo jets. And researchers utilize GPUs to advance the frontiers of science with <u>high performance computing</u>. The company has more than 4,500 patents issued, allowed or filed, including ones covering ideas essential to modern computing. For more information, see <u>www.nvidia.com</u>.

Certain statements in this press release including, but not limited to statements as to: the impact and benefits of NVIDIA Tesla GPUs; and the effects of the company's patents on modern computing 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 reports NVIDIA files with the Securities and Exchange Commission, or SEC, including its Form 10-K for the fiscal period ended January 29, 2012. 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.

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About NVIDIA

Since 1993, NVIDIA (NASDAQ: NVDA) has pioneered the art and science of visual computing. The company's technologies are transforming a world of displays into a world of interactive discovery — for everyone from gamers to scientists, and consumers to enterprise customers. More information at http://nvidianews.nvidia.com/ and http://nvidianews.nvidia.com/.

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Media Contacts

George Millington +1 408 562 7226 gmillington@nvidia.com