The Johns Hopkins University Joins 12 Other World-Leading Research Institutions as an NVIDIA CUDA Center of Excellence

CUDA Program Seeks to Accelerate Pace of Research, Drive Scientific Discovery With GPU Computing

SANTA CLARA, CA -- NVIDIA today announced that it has named The Johns Hopkins University a CUDA Center of Excellence, recognizing its ground-breaking work leveraging NVIDIA GPUs and NVIDIA® CUDA® technology to drive education and research programs across a range of scientific disciplines.

The CUDA Center of Excellence program rewards and fosters collaboration with leading institutions that are at the forefront of parallel computing research. Johns Hopkins joins an elite network of 12 institutions around the world that are advancing awareness of parallel computing, and empowering academics and scientists to conduct world-changing research.

University researchers have pioneered the field of data-intensive computing, addressing a key bottleneck to transformative scientific discovery -- researchers' inability to analyze in a timely manner the massive amounts of complex data generated by instruments and simulations. They are leveraging the tremendous processing power of GPUs to dramatically speed up data analysis across multiple fields, including astrophysics, fluid dynamics, genomics, life sciences, medical imaging, and numerical simulation, among others.

"Modern scientific computing is amazingly diverse, with scientists assembling novel systems by combining commodity components in unusual ways," said Alex Szalay, Alumni Centennial Professor of Physics and Astronomy at The Johns Hopkins University. "Our collaboration with NVIDIA will open up new directions in data-intensive scientific computing. We are working to enable researchers to dramatically increase the pace of scientific discovery by focusing on ways to on quickly and cost-effectively stream petabytes of data into an array of a hundred GPUs for processing at supercomputer rates."

Johns Hopkins has integrated CUDA technology and GPU computing curriculum into multiple disciplines across the schools of science and engineering. In addition, it is developing a new e-Science curriculum to educate students across all campus disciplines in modern parallel computing techniques.

As a CUDA Center of Excellence, Johns Hopkins will utilize GPU computing equipment and grants provided by NVIDIA to support a number of research and academic programs, including:

- Deployment of the "Data-Scope," a GPU-powered, ultra-high throughput supercomputer to dramatically increase the speed of scientific data analysis
- Exploration of innovative astronomy algorithms, potentially leading to major new discoveries
- Extreme-scale numerical simulations of the universe, which can help reveal how galaxies were formed
- Massive processing and remote visualization of medical images, designed to improve the quality of healthcare
- Expand multi-scale, multi-physics efforts to handle very large environmental simulations, like ocean circulation models
- Real-time planning of radiation oncology treatments with ray tracing on GPUs to individualize and improve treatments of cancer patients
- Explore future extreme data intensive architectures, with low-power computing

Other CUDA Centers of Excellence include: Georgia Tech, Harvard University, Institute of Process Engineering at the Chinese Academy of Sciences, National Taiwan University, Stanford University, Tokyo Tech (Japan), Tsinghua University (China), University of Cambridge (England), University of Illinois at Urbana-Champaign, University of Maryland, University of Tennessee, and University of Utah. For more information on the NVIDIA CUDA Center of Excellence program, visit: http://research.nvidia.com/content/cuda-centers-excellence.

CUDA is NVIDIA's parallel computing architecture, which enables dramatic increases in computing performance by harnessing the power of GPUs. NVIDIA CUDA GPUs support all GPU computing programming models, APIs, and languages, including CUDA C/C++/Fortran, OpenCL, DirectCompute, and the recently announced Microsoft C++ AMP. More than 460 universities and institutions worldwide teach the CUDA programming model within their curriculum. For more information on NVIDIA CUDA technology, visit: www.nvidia.com/CUDA.

About The Johns Hopkins University
The Johns Hopkins University, founded in Baltimore in 1876 by philanthropist Johns Hopkins, was America's first research university and today is a leading center for higher education in more than 250 major fields of study conferring both graduate and undergraduate degrees at campuses throughout the Baltimore-Washington area and in Italy and China. The university comprises schools of Arts & Sciences, Business, Education, Engineering, International Studies, Medicine, Music, Nursing

and Public Health. For more about how these and other divisions and organizations of The Johns Hopkins University are working to advance humanity in service to our world see www.jhu.edu.

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NVIDIA, CUDA, GPU, GPU computing, supercomputing, parallel computing, GPGPU, high performance computing, Johns Hopkins University, JHU, research, scientific computing

About NVIDIA
NVIDIA (NASDAQ: NVDA) awakened the world to computer graphics when it invented the GPU in 1999. Today, its processors power a broad range of products from smart phones to supercomputers. NVIDIA's mobile processors are used in phones, tablets and auto infotainment systems. PC gamers rely on GPUs to enjoy spectacularly immersive worlds. Professionals use them to create visual effects in movies and design everything from golf clubs to jumbo jets. And researchers utilize GPUs to advance the frontiers of science with high-performance computers. The company holds more than 2,100 patents worldwide, including ones covering ideas essential to modern computing. For more information, see www.nvidia.com.

Certain statements in this press release including, but not limited to statements as to: the impact and benefits of NVIDIA CUDA architecture and NVIDIA GPUs; 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-Q for the fiscal period ended July 31, 2011. 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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