NVIDIA and University of Illinois Join Forces to Release World's First Textbook on Programming Massively Parallel Processors

"David Kirk and Wen-mei Hwu are pioneers in this increasingly important field, and their insights are invaluable and fascinating. This book will be the standard reference for years to come." - Hanspeter Pfister, Harvard University

SANTA CLARA, CA -- The first textbook of its kind, "Programming Massively Parallel Processors: A Hands-on Approach" launches today, authored by Dr. David B. Kirk, NVIDIA Fellow and former chief scientist, and Dr. Wen-mei Hwu, who serves at the University of Illinois at Urbana-Champaign as Chair of Electrical and Computer Engineering in the Coordinated Science Laboratory, co-director of the Universal Parallel Computing Research Center and principal investigator of the CUDA Center of Excellence.

The textbook, which is 256 pages, is the first aimed at teaching advanced students and professionals the basic concepts of parallel programming and GPU architectures. Published by Morgan-Kauffman, it explores various techniques for constructing parallel programs and reviews numerous case studies.

With conventional CPU-based computing no longer scaling in performance and the world's computational challenges increasing in complexity, the need for massively parallel processing has never been greater. GPUs have hundreds of cores capable of delivering transformative performance increases across a wide range of computational challenges. The rise of these multi-core architectures has raised the need to teach advanced programmers a new and essential skill: how to program massively parallel processors.

"I'd like to personally congratulate David and Wen-mei for writing this landmark book and enabling generations of student programmers to understand and exploit the massively parallel architecture of GPUs," said Bill Dally, chief scientist at NVIDIA and former chairman of Stanford University's computer science department. "As a former professor, I have seen firsthand how seminal texts like this can transform a field. I look forward to seeing the transformation of computing as students are inspired and guided to master GPU computing by this book."

Among the book's key features:

First and only text that teaches how to program within a massively parallel environment Portions of the NVIDIA-provided content have been part of the curriculum at 300 universities worldwide Drafts of sections of the book have been tested and taught by Kirk at the University of Illinois Book utilizes OpenCL(TM) and CUDA(TM) C, the NVIDIA(R) parallel computing language developed specifically for massively parallel environments

For more information on "Programming Massively Parallel Processors: A Hands-on Approach," please visit the microsite. The book is available to purchase directly from Elsevier or Amazon.

About NVIDIA NVIDIA (NASDAQ: NVDA) awakened the world to the power of computer graphics when it invented the graphics processing unit (GPU) in 1999. Since then, it has consistently set new standards in visual computing with breathtaking, interactive graphics available on devices ranging from portable media players to notebooks to workstations. NVIDIA's expertise in programmable GPUs has led to breakthroughs in parallel processing which make supercomputing inexpensive and widely accessible. Fortune magazine has ranked NVIDIA #1 in innovation in the semiconductor industry for two years in a row. For more information, see www.nvidia.com.

Certain statements in this press release including, but not limited to, statements as to: the benefits, features, impact, performance and capabilities of NVIDIA GPUs; and the impact of "Programming Massively Parallel Processors: A Hands-on Approach" 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: development of more efficient or faster technology; design, manufacturing or software defects; the impact of technological development and competition; changes in consumer preferences and demands; customer adoption of different standards or our competitor's products; 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 including its Form 10-Q for the fiscal period ended October 25, 2009. Copies of reports filed with the SEC are posted on our 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://blogs.nvidia.com/.

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