



PRESS RELEASE



CUDA POWERS NEXT GENERATION OF “4D CAPTURE” APPLICATIONS

SAN DIEGO, CA., 08 August 2007 – at the SIGGRAPH exhibition today, Dimensional Imaging Ltd, in collaboration with NVIDIA Corporation (NASDAQ: NVDA), demonstrated for the first time its world-leading “4D capture” system accelerated using NVIDIA Quadro FX 5600 graphics processing units (GPUs). Dimensional Imaging’s proprietary DI3D™ technology is able to derive a time sequence of 3D models from a stereo video stream in a process known as “4D Capture”. DI3D™ uses highly computationally intensive image processing algorithms to avoid the need for markers, special lighting or make-up, which are required by previous 3D capture systems.

Working with NVIDIA application specialists, Dimensional Imaging has implemented its core algorithms in CUDA, NVIDIA’s revolutionary C-Compiler for developing compute intensive applications on a GPU. NVIDIA CUDA has allowed processing times to be reduced from minutes on conventional processors to seconds on GPUs. Attendees of this week’s SIGGRAPH exhibition can view the demonstration in action at Dimensional Imaging’s Stand #003 at the San Diego Convention Centre.

“Our algorithms are ideal for implementation on parallel processing hardware, but the costs and specialised development effort required by other parallel processing technologies has prevented us from pursuing them in a serious way; but using CUDA we have found it relatively easy to access the awesome computational power of NVIDIA GPU technology,” said Douglas Green, Chief Software Engineer at Dimensional Imaging. He added that, “for us “this is just the start - we expect to achieve even more performance gains as we continue to optimise our algorithms to run under CUDA.”

“What is most impressive about Dimensional Imaging’s use of the CUDA software environment is the speed at which they were able to develop their application to harness the parallel processing power of the GPU, said Andy Keane, general manager of the GPU Computing group at NVIDIA. “In just two weeks, they were able to port their application and experience massive speed ups in performance - we are delighted to see pioneering companies such as Dimensional Imaging benefiting so quickly and dramatically from adopting CUDA.”

“The use of CUDA is a fantastic development for us, enabling our customers to benefit directly from using NVIDIA graphics hardware to achieve results much more quickly than before. We are also exciting by the potential for NVIDIA’s recently announced Tesla technology to enable new applications for our technology that were previously limited by available processing power. This brings us a step closer to our dream of being able to generate high-resolution 3D models in real time at video frame rates,” said Dr Colin Urquhart, Chief Executive Officer at Dimensional Imaging.

About Dimensional Imaging Ltd

Founded in 2002 and based in Glasgow, Scotland, Dimensional Imaging Ltd is a private company specialising in human body three dimensional surface image capture and analysis. The company's highly innovative Di3D™ passive stereo photogrammetry technology delivers ultra-high resolution 3D surface images from one or more stereo pairs of instantaneously captured digital stills images. Dimensional Imaging supplied systems are already in use world-wide for a range of applications such as oral and maxillofacial surgery, orthodontics, burns treatment, facial recognition and entertainment. The company is also developing groundbreaking 4D surface image capture technology, which is capable of capturing 3D video sequences of dynamically changing surfaces. For more information, visit www.di3d.com.

About NVIDIA Corporation

NVIDIA Corporation is the worldwide leader in programmable graphics processor technologies. The Company creates innovative, industry-changing products for computing, consumer electronics, and mobile devices. NVIDIA is headquartered in Santa Clara, CA and has offices throughout Asia, Europe, and the Americas. For more information, visit www.nvidia.com.