Nvidia appoints first CUDA centre of excellence

Nvidia and the University of Illinois at Urbana-Champaign (UIUC) today announced that UIUC has been named as the world's first CUDA Center of Excellence.

Nvidia has donated $500,000 to UIUC for the development of parallel computing facilities and the continuation of its research programs.

"The CUDA Center of Excellence program rewards schools that truly embrace the concept of parallel processing as the future of computing," said Dr. David Kirk, chief scientist at Nvidia. "Schools receiving this accreditation integrate the CUDA software environment into their curriculum to help their students harness the capabilities of these new parallel processing architectures. As one of the country's leading schools in this field, I am personally delighted to appoint UIUC as our first CUDA Center of Excellence."

The Theoretical and Computational Biophysics Group at UIUC was one of the first research groups to leverage the parallel architecture of the GPU to accelerate their research in the field of computational biophysics. They have successfully accelerated NAMD/VMD – a popular parallel molecular dynamics application that analyzes large biomolecular systems. It is hoped that this donation will aid this group, and others at the university, to further their work and speed them down the path to great discovery.

Universities wishing to become CUDA Centers of Excellence must teach a CUDA class and use CUDA technology in their research, usually across several labs. In return, NVIDIA supports the school through funding and equipment donations, including help to set up a GPU computing cluster.

The Principal Investigator of the first CUDA Center of Excellence is Prof. Wen-mei Hwu, Sanders-AMD Endowed Chair in Electrical & Computer Engineering at Illinois. According to Hwu, "Future increases in computational performance are directly rooted in massively parallel hardware such as many-core GPUs. The biggest challenge today is in parallelizing code to take advantage of the hardware most successfully. Nvidia's groundbreaking CUDA solution is a significant step in this direction."