



**nVISION 08**  
THE WORLD OF VISUAL COMPUTING

Technical Conference Overview

August 25-27, 2008

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On behalf of NVIDIA I would like to invite you to NVISION 2008, being held on August 25-27 in San Jose, CA.

NVISION 2008 is the one event where you can gain practical state-of-the-art technical training on CUDA and advanced Visualization and learn about the future of NVIDIA's GPU. With over 70 million CUDA-ready GPUs already installed in systems, this 3 day event can help prepare you to fully take advantage to the industry's shift to high-performance, accessible computing.

With over 77 hours of Technical sessions, NVISION 2008 is the only event that can cover both your GPU computing and visualization training this year

Meet key engineers and architects from NVIDIA along with leading industry experts by attending technical sessions and round table meetings. This is the one event where you have face-to-face access for technical discussions with NVIDIA technical leaders.

Register before August 18 and qualify for a free next-generation NVIDIA Quadro FX high-end professional graphics board valued at US\$1999 MSRP!

See you at NVISION 2008!

Andy Keane  
GM of Tesla Computing Products

Jeff Brown  
GM of Quadro Products

To find out more about the conference visit us at <http://www.nvision2008.com>

# Over 77 Hours of Technical Sessions

- 18 hours of NVIDIA Research technical sessions focused on CUDA
- 15 hours of Professional visualization technical sessions
- 13.5 hours for Automotive developers
- 12.5 hours of Game developer technical sessions
- 10 hours of CUDA training with hands on labs, including a new advanced training class
- 8 hours for Mobile developers

# CUDA Boot Camp

Your Desktop is a Supercomputer - CUDA Boot camp training session

Accelerating applications with CUDA™ on many-core processors.

With NVIDIA GPUs currently delivering over 500 gigaflops, your desktop machine is already a supercomputer. Oster and Ruetsch will give an in-depth CUDA tutorial on methods to boost coding productivity. The tutorial will explore advances in the architecture using the latest release of CUDA software, while highlighting new software features and expert optimization techniques.

Learn to program NVIDIA's GPUs using standard C, existing coding tools, and the CUDA extensions.

In this session, you will learn about:

- Learn the basics of NVIDIA's CUDA Computing Architecture
- Get detailed instruction in CUDA from experienced developers
- Get a walk through of the compiling and debugging tools
- Participate in hands-on coding exercises
- Ask questions directly of the developers that work with CUDA at NVIDIA

In addition, you will learn about the optimized CUDA libraries for Fast Fourier Transforms, Basic Linear Algebra System, and Data Parallel Primitives Library. These libraries can be quickly integrated with your C, C++, or Fortran code to give an immediate performance boost to your applications.

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# Advanced CUDA Training

How to Get the Next 20x of Performance From Your CUDA Application - Advanced CUDA techniques

Advanced CUDA techniques and optimization tutorial.

A half-day, in-depth hands on CUDA tutorial designed for advanced CUDA developers to learn about methods to boost code productivity, as well as the opportunity to network with key CUDA architects and developers. This tutorial will explore the new architecture using the latest release of CUDA software, while highlighting new software features and expert optimization techniques. Sign up to discover techniques that can deliver orders of magnitude speedup in your code.

Learn to optimize CUDA code and fully exploit the power of NVIDIA's new double-precision, teraflop GPU. Optimized code can run over 100x faster on this chip than on a CPU, providing a workstation the power of a compute cluster, and a compute cluster the power of a supercomputer.

In this session, you will learn about:

- Advanced CUDA optimization techniques, tips and tricks for the 10-series architecture
- Profiling tools to identify performance bottlenecks and how to avoid them
- Optimizing memory transfer speed and minimizing memory latency
- Maximizing processor occupancy (or usage)
- Use of mixed single and double precision for performance

The CUDA Boot Camp session is recommended to New CUDA Programming attendees in advance of this session

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# Professional Visualization Sessions

<u>Session #</u>	<u>Session</u>
22	How to Double Your Graphics Performance Without New Hardware
25	OpenGL and the Future
32	mental mill & MetaSL: Advances in Cross-Platform Shader Authoring
23	Leveraging the World's Fastest Scene Graph (NVSG)
24	HD is Now HDR & 8MP
28	Does your Software Scale?
30	Learning about Shader Programming in mental ray
31	mental images 3D Web Services Platform -- RealityServer
26	What Now. What Next. Integrating with SDI
27	Remoting Your 3D

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# NVIDIA Research CUDA Sessions

<u>Session #</u>	<u>Session</u>
15	Accelerating Computational Biology by 100× Using CUDA
19	Next-Generation Computer Vision Using CUDA
16	How We Crammed a Black Hole, a Star Cluster, & Turbulent Plasma Into a GPU (& Lived to Talk About It)
63	Research Presentation I
65	Research Presentation II
21	Teaching CUDA & Tesla at UIUC
66	NVIDIA Research Showcase
67	Research Roundtables I: Teaching Parallel Programming with CUDA
68	Research Roundtables I: GPUs for Computational Biology
69	Research Roundtables I: GPUs for Astrophysics
70	Research Roundtables II: GPUs for Manycore Research
71	Research Roundtables II: GPUs for Computer Vision and Image Processing
72	Research Roundtables II: GPUs for Weather Modeling

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# Game Developer Sessions

<u>Session #</u>	<u>Session</u>
34	CryEngine
33	Unreal Engine 3: Features & Tools Demo
37	Developer Tools Showcase
43	The New "X" Factor: An Introduction to NVIDIA PhysX
44	The Art of PhysX: A Guide to Game Creativity
36	Beautiful Women of the Future
39	Introduction to DirectX 11
45	Shape of Things to Come: Next-Gen Physics Deep Dive
40	Life on the Bleeding Edge: More Secrets of the NVIDIA Demo Team
35	Easy Immersion with NVIDIA 3D Stereo
38	Developer Tools Lunch Roundtable

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