

# Call for Papers

## The 2009 International Workshop on GPU Technologies and Applications (GPUTA 2009)

December 14-16, 2009, Kaohsiung, Taiwan

(in conjunction with the 10<sup>th</sup> International Symposium on Pervasive Systems,  
Algorithms and Networks, I-SPAN 2009)

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The Graphics Processing Units (GPU) are now considered as serious challengers for high-performance computing solutions because of its suitability for massively parallel processing and vector computations. GPUs have been used to accelerate a wide range of applications such as bioinformatics, physics and chemistry, business forecasting and medical imaging applications etc., A special workshop dedicated to GPU structure, methods, algorithms and applications will be hosted in conjunction with the the 10th International Symposium on Pervasive Systems, Algorithms and Networks (ISPAN 2009). The primary goal of this workshop is to provide a forum to discuss above general purpose programming platforms. We are calling papers and poster presenters who provide insights into current GPU practice and experience, and chart future directions in data-parallel processor technologies and applications. Contributions presenting novel, original work in all areas of GPU from hardware abstractions to specific applications are welcome. The topical areas covered by this workshop include but are not limited to:

- GPU programming with CUDA and OpenCL
- GPGPU applications with OpenGL and DirectX
- GPU compilers and operating systems
- GPU architectures
- GPU cluster and high-end computing
- Hybrid parallel computing with GPU and Multi-core architectures
- GPU power/efficiency
- GPU benchmarking/measurements/scalability
- GPU-based applications to the following scientific areas, but not limit to:
  - Computational chemistry
  - Computational physics
  - Bioinformatics and computational biology
  - Image and video compression
  - Signal processing
  - Data security
  - Computer graphics and multimedia
  - GPU intensive visualization
  - Computational fluid dynamics
  - Data mining

### Paper Submission

Authors are invited to submit original papers: they must not substantially duplicate work that any of the authors have published elsewhere or have submitted in parallel to any other conferences that have proceedings. Papers must be written in English and must be in standard IEEE conference format limited to a maximum of 6 pages. The proceedings of the workshop will be published by IEEE Computer Society Press and indexed by EI. Submitting a paper to the workshop means that if the paper is accepted, at least one author should attend the workshop to present the paper. For no-show authors, their papers will be removed from the digital library after the conference. All submissions will be handled

electronically through *GPUTA* 2009 paper submission system: <http://grid.chu.edu.tw/GPUTA2009/>, and must be in PDF.

### **International Journal Publication:**

Selected best papers of the workshop will be further considered for a special issue of the *Journal of Supercomputing* (Springer) on Visualization and Computation.

### **Important Dates**

Submission Deadline: July 15, 2009

Authors Notification: Aug. 15, 2009

Final Manuscript Due: Sept. 1, 2009

Workshop: Dec. 14-16, 2009

### **Workshop Co-Chairs**

#### **Prof. Hai Jiang**

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### **Technical Program Committee Members**

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