Advances in GPU Computing
Poster List

1 Accelerating the Local Outlier Factor Algorithm on a GPU for Intrusion Detection Systems
Malak Alshawabkeh, Byunghyun Jang and David Kaeli
Northeastern University and AMD

2 CUDA & OpenCL Tasks and Conduits for Portable Heterogeneous Architecture Applications
James Brock and Miriam Leeser
Northeastern University

3 Delivering 100x Speedup for Three-Dimensional Finite Difference Time Domain (FDTD) on GPU
Zhongliang Chen and David Kaeli
Northeastern University

4 A GPU-accelerated flow solver for incompressible two-phase liquid flows
Stephen Codyer, Mehdi Raessi, and Gaurav Khanna
UMASS Dartmouth

5 Reliable GPGPU Computation
Navid Farazmand, Rafael Ubal and David Kaeli
Northeastern University

6 Optimizing a General purpose GPU implementation of a Phase-Field Model of Binary Alloy Solidification
Xiang Gong, David Kaeli, Damien Tourret, and Alain Karma
Northeastern University

7 Autotuning a High-Level Language Targeted to GPU Kernels
Scott Grauer-Gray, Rober Searles, Lifan Xu, Sudhee Ayalasomayajula and John Cavazos - University of Delaware

8 Profiling OpenCL applications using Events
Perhaad Mistry, Dana Schaa, Enqiang Sun, David Kaeli and Norman Rubin - Northeastern University and AMD

9 OpenCL implementation of Diffusion for Multicore CPUs
Perhaad Mistry, Xiang Gong, David Kaeli, Damien Tourret and Alain Karma - Northeastern University

10 A 1024-core 70 GFLOP/W Floating Point Manycore Microprocessor
Andreas Olofsson - Adapteva

11 Computational Model of Optical Coherence Tomography in Lung Tissue
Joseph P. Robinson, Tristan B. Swedish, David Kaeli and Charles A. DiMarzio – Northeastern University

12 Advanced Ultrasound using GPUs
Dana Schaa, Xiangyu Li and David Kaeli – Northeastern University

13 A Distributed Platform for OpenCL
Dana Schaa and David Kaeli – Northeastern University

14 Accelerating an Imaging Spectroscopy Algorithm for Submerged Marine Environments Using GPUs
Matthew Sellitto, Dave Kaeli and James Goodman – Northeastern University and HySpeed LLC

15 Simulation Framework and Optimizations for Compute Kernels in Embedded GPU Using OpenCL
Kulin Seth, Yash Ukidave, Gunar Schirner and David Kaeli – Northeastern University and Qualcomm

16 Object Detection using Speeded Up Robust Features (SURF) Algorithm
Neel Shah, Perhaad Mistry, David Kaeli, Dana Schaa, and Enqiang Sun – Northeastern University

17 Enabling Task-level Scheduling on Heterogeneous Platforms
Enqiang Sun, Dana Schaa and David Kaeli – Northeastern University