



Heterogeneous Computing: Architectures, Tools, Applications

Organizer: Maya Gokhale (Los Alamos National Laboratory)

Heterogeneous Processing

Maya Gokhale, Los Alamos National Laboratory

The Chances and Challenges of Parallelism

Robert Strzodka, Stanford University, Max Planck Center

On the Acceleration of Shortest Path on FPGAs

Zachary K. Baker and Maya Gokhale, Los Alamos National Laboratory

Speech Recognition on Cell Broadband Engine

Yang Liu, Holger Jones, John Johnson, Sheila Vaidya,
Lawrence Livermore National Laboratory;
Michael Perrone, Borivoj Tydlit, Ashwini Nanda, IBM;
Daniel May, Mississippi State

A Transport Kernel on the Cell Broadband Engine

Paul Henning, Los Alamos National Laboratory

The PeakStream Platform

Matthew Papakipos, PeakStream, Inc.

The Scout Compiler

Jeff Inman, Pat McCormick, and Jim Arens, Los Alamos National Laboratory

Array Allocation in Non-Cached Memory Systems

Justin L. Tripp and Trident Compiler Team, Los Alamos National Laboratory

Compiler Support for Heterogeneous Computing in a CELL Processor

Yuan Zhao and Ken Kennedy, Department of Computer Science, Rice University

Program Analysis Tools for Application-Specific Architectures

Maya B. Gokhale and Matthew J. Sottile, Los Alamos National Laboratory

Porting Plan 9 to the IBM BG/L Supercomputer

Ron Minnich, Vita Nuova, Charles Forsyth, Los Alamos National Laboratory;
Jim McKie, Bell Labs;
Eric Van Hensbergen, Volker Strumpfen, IBM

