Call For Papers
Second International Workshop on
Data Management on New Hardware
(DaMoN 2006)
Chicago, Illinois
June 25, 2006
Sponsored by
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Objective
The aim of this one-day workshop is to bring
together researchers who are interested in
optimizing database performance on modern
computing infrastructure by designing new data
management techniques and tools.

Motivation
The continued evolution of computing hardware
and infrastructure imposes new challenges and
bottlenecks to program performance. As a result,
traditional database architectures that focus
solely on I/O optimization increasingly fail to
utilize hardware resources efficiently. CPUs with
superscalar out-of-order execution, simultaneous
multi-threading, multi-level memory hierarchies,
and future storage hardware (such as MEMS)
impose a great challenge to optimizing database
performance. Consequently, exploiting the
characteristics of modern hardware has become
an important topic of database systems research.

The goal is to make database systems adapt
automatically to the sophisticated hardware
characteristics, thus maximizing performance
transparently to applications. To achieve this
goal, the data management community needs
interdisciplinary collaboration with computer
architecture, compiler and operating systems
researchers. This involves rethinking traditional
data structures, query processing algorithms,
and database software architectures to adapt to
the advances in the underlying hardware
infrastructure.

Topics Of Interest
We seek submissions bridging the area of database
systems to computer architecture, compilers, and
operating systems. In particular, submissions
covering topics from the following non-exclusive list
are encouraged:

- cost models and query optimization for novel
  hierarchical memory systems
- hardware systems for query processing
- data management using co-processors
- query processing using computing power in
  storage systems
- database architectures for low-power computing
  and embedded devices
- database architectures on multi-threaded and
  chip multiprocessors
- database performance analysis, algorithms, and
  data structures on modern hardware
- databases and transactional memory systems
- compiler and operating systems advances to
  improve database performance
- new benchmarks for microarchitectural
  evaluation of database workloads

Organization
Workshop Co-Chairs
Anastassia Ailamaki, Carnegie Mellon University
Peter Boncz, CWI Amsterdam
Stefan Manegold, CWI Amsterdam

Program Committee
Amr El Abbadi, Univ. of California Santa Barbara
Shimin Chen, Intel
Naga Govindaraju, U. of North Carolina Chapel Hill
Goetz Graefe, Microsoft
Sami Iren, Seagate
Bradley C. Kuszmaul, MIT
Qiong Luo, HKUST
Andreas Moshovos, University of Toronto

Important Dates
Paper submission: April 16
Notification of acceptance: May 14
Camera-ready copies due: May 28

http://www.cs.cmu.edu/~damon2006