Press Releases

Presentation of Awards for Papers, Poster and Challenges

TAMPA, Florida - SC06, the international conference of high performance computing, networking, data storage and analysis, presented awards on November 16th for the best paper, best student paper, best research poster, and several competitive challenges.

This year's conference was the second largest since the meeting was first held in 1988, with more than 7,100 badged attendees filling the Tampa Convention Center. The conference exhibition featured 274 exhibitors filling all available floor space in the 200,000-square foot hall.

"Our expectations have been exceeded in every aspect of our week in Tampa, from the conference attendance and exhibits to the warmth and friendliness of Tampa," said SC06 General Chair Barbara Horner-Miller. "The success of the conference reflects the efforts of our volunteer committee members, our dedicated exhibitors, those who submitted their research to the technical program and the professional staff of the convention center. Thank you all."

Here is a list of the winners announced Thursday:

Best Paper: "Scalable Algorithms for Molecular Dynamics Simulations on Commodity Clusters," by Kevin J. Bowers, Edmond Chow, Huafeng Xu, Ron O. Dror, Michael P. Eastwood, Brent A. Gregerson, John L. Klepeis, Istvan Kolossvary, Mark A. Moraes, Federico D. Sacerdoti, John K. Salmon, Yibing Shan, and David E. Shaw, all of D. E. Shaw Research.

Best Student Paper: "The Design Space of Data-Parallel Memory Systems," Jung Ho Ahn, Mattan Erez and William J. Dally (advisor), Stanford University.

Best Poster:"IANUS: Scientific Computing on an FPGA-Based Architecture," Mantovani Filippo, University of Ferrara, Italy.

The Gordon Bell Prize for Peak Performance was awarded to the "Large-Scale Electronic Structure Calculations of High-Z Metals on the BlueGene/L Platform" team of Francois Gygi, University of California, Davis; Erik W. Draeger, Martin Schulz and Bronis R. de Supinski, Lawrence Livermore National Laboratory; John A. Gunnels, Vernon Austel and James C. Sexton, IBM; Franz Franchetti, Carnegie Mellon University; and Stefan Kral, Christoph W. Ueberhuber and Juergen Lorenz, Vienna University of Technology.

A Gordon Bell Prize for Special Achievement was awarded to "The BlueGene/L Supercomputer and Quantum Chromodynamics" project team of Pavlos Vranas, Gyan Bhanot, Matthias Blumrich, Dong Chen, Alan Gara, Philip Heidelberger, Valentina Salapura, and James C. Sexton, IBM Research; and

Ron Soltz, Lawrence Livermore National Laboratory.

A Gordon Bell Honorable Mention for Peak Performance was given to "A 185 Tflop/s Simulation of A 185 Tflop/s Simulation of Amyloid-forming Peptides from Yeast Prion Sup35 with the Special-Purpose Computer System MD-GRAPE3" by Tetsu Narumi, Yousuke Ohno, Noriaki Okimoto, Takahiro Koishi, Atsushi Suenaga, Futatsugi, Ryoko Yanai, Ryutaro Himeno, Shigenori Fujikawa and Makoto Taiji, all of RIKEN; and Mitsuru Ikei, Intel.

The winner of the **Analytics Challenge** was the "Remote Rutime Steering of Integrated Terascale Simulation and Visualization" by Hongfeng Yu, University of California, Davis (Technical lead); Tiankai Tu, Carnegie Mellon University (Team lead); Jacobo Bielak, Carnegie Mellon University; Omar Ghattas, The University of Texas at Austin; Julio C. Lopez, Carnegie Mellon University; Kwan-Liu Ma, University of California, Davis; David R. O'Hallaron, Carnegie Mellon University; Leonardo Ramirez-Guzman, Carnegie Mellon University; Nathan Stone, Pittsburgh Supercomputing Center; and Ricardo Taborda-Rios, Carnegie Mellon University; and John Urbanic, Pittsburgh Supercomputing Center.

The winner of the **Storage Challenge for Large Systems** was "High Performance Data Analysis for Particle Physics using the Gfarm File System" by a team from University of Tsukuba and KEK, Japan. Team members are Osamu Tatebe, Nobuhiko Katayama, Mitsuhisa Sata, Taisuke Boku, Akira Ukawa, Shohei Nishida, and Ichiro Adachi.

The winner of the **Storage Challenge for Small Systems** was "Trading Memory for Disk: Using Parallel Access to Fast InfiniBand Disk Arrays for Large Computational Chemistry Applications" from Ames Laboratory. The Ames team was Brett Bode, Kyle Schochenmaier, and Troy Benjegerdes.

The winner of the **Bandwidth Challenge** was "Transporting Sloan Digital Sky Survey Data using SECTOR" by a team from the National Center for Data Mining from the University of Illinois at Chicago. The team was led by Robert Grossman and included Yunhong Gu, Michal Sabala, Shirley Connelly, David Hanley, Joe Mambretti, Alex Szalay, Ani Thakar, Jan vandenBerg and Alainna Wonders. The team achieved 8 gigabits per second (Gbps) of sustained data transfer or a 10 Gbps link and saw a peak transfer rate of 9.18 Gbps.

The Bandwidth Challenge also presented two honorable mentions. The team from Indiana University was honored for "Spirit of the Competition" and Caltech's team was recognized for "Heroic Effort."