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November 14-20, 2009
www.SC09.supercomputing.org

NEWS RELEASE

For Immediate Release

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The 22nd Annual SC Conference, SC09, Technical Program to Feature Focus Areas on Bio-Computing, Sustainability and the 3D Internet

PORTLAND, Oregon—March 17, 2009 – SC09, the 22nd annual SC conference, recognized globally as the premier international conference on high performance computing, networking, storage and analysis, will turn the spotlight on the role of high performance computing (HPC) in fields that routinely make headlines and affect our lives: the biological sciences, environmental sustainability, and the emerging 3D Internet.

SC returns to Portland Nov. 14 - 20, for a week of activities that will draw approximately 11,000 experts from industry, academia and government to the City of Roses. The conference technical program, featuring technical papers, tutorials, invited speakers, panel discussions and posters, will look closely at ways in which HPC supports bio-computing, sustainability and the 3D Internet.

“We chose these three focus areas for the conference because they are so fundamentally important to human health and the health of our planet, and, in the case of the 3D Internet, to how we share, interact with and understand information,” said Dr. Wilfred Pinfold, general chair of the SC09 conference and Director, Extreme Scale Programs at Intel. “The technical program will show how HPC technologies provide a powerful tool to support work in bio-computing, sustainability and the 3D Internet and will help people make scientific and engineering breakthroughs in these areas.”

The Bio-Computing Focus Area will explore research that harnesses the power of HPC to solve problems in the biological sciences, including computational techniques that can be used to understand the behaviors of genes and proteins that can trigger cancers and other serious diseases. Techniques used to organize, access and understand the huge volumes of biological data collected by researchers also will be explored.

“Bio-Computing covers a wide range of specialties—bioinformatics, statistics, computational chemistry, artificial intelligence, applied mathematics and more,” said Peg Folta, Computing Applications and Research Senior Manager at Lawrence Livermore National Laboratory (LLNL) and head of the SC09 Bio-Computing Focus Area.

“Much of the research in these fields is data and compute intensive. The infusion of leading edge high performance

computing solutions can enable a systems approach to understanding and predicting life, which is fundamental to challenges in the biomedical, bio-energy, and bio-defense fields.

The Sustainability Focus Area will examine issues that make headlines every day, including how to maintain environmental quality, how to develop and deploy renewable and clean energy supplies, and how to improve energy efficiency in businesses, data centers and the home.

“HPC is a tool used in a wide range of sustainability research, including climate modeling to better understand the impacts of climate change, the development of renewable and alternative energy sources, and the development of green data centers.” said Brent Gorda, a high performance computing architect at LLNL who leads SC09’s Sustainability Focus Area. “With recent fluctuations in energy prices, the economic downturn and possible effects of climate change, these topics have become important areas of opportunity for our community.”

The 3D Internet Focus Area will look at ways in which 3D visualization and immersive environments such as Second Life are changing the way we communicate, share information, educate students and explore scientific problems.

“The Internet changed the way we share information and the 3D Internet will change the way we relate to each other in fundamental ways,” said John Hengeveld, a business strategy manager at Intel and chair of the 3D Internet Focus Area. “These graphically rich 3D worlds require a host of HPC resources, and they could forever change education and how people come to understand scientific concepts.”

Submissions for most areas of the SC09 technical program will be accepted beginning March 16. Technical paper abstracts are due April 3 and final papers as well as submissions for tutorials, workshops and panels are due April 6.

For more information please visit the SC09 website at <http://sc09.supercomputing.org/>. For questions regarding the technical program, send email to program@info.supercomputing.org. For questions related to the SC09 focus areas, send email directly to the program focus area chairs at bio-computing@info.supercomputing.org, sustainability@info.supercomputing.org or 3DInternet@info.supercomputing.org.

About SC09

SC09, sponsored by the ACM (the Association for Computing Machinery) and the IEEE Computer Society, offers a complete technical education program and exhibition to showcase the many ways high performance computing, networking, storage and analysis lead to advances in scientific discovery, research, education and commerce. This premier international conference includes a globally attended technical program, workshops, tutorials, an exhibit area, demonstrations and hands-on learning. For more information, please visit <http://sc09.supercomputing.org/>.

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