

# STOCKTON COLLEGE

THE RICHARD STOCKTON COLLEGE OF NEW JERSEY



## Stockton Students and Faculty Participated in World's Largest Supercomputing Conference

Conference Speakers Included Al Gore, Intel CTO, and Institute for Systems Biology Co-founder

### ***For Immediate Release***

Tuesday, February 23, 2010

**Contact:** Tim Kelly  
Susan Allen  
Office of Public Relations  
Galloway Township, NJ 08240  
Tim.Kelly@stockton.edu  
(609) 652-4950

**Galloway Township, NJ-** The Computational Science program at The Richard Stockton College of New Jersey is growing rapidly as more students are attracted to the unique blend of math and science used in making quantitative predictions concerning real-world scenarios. Students and faculty from Stockton College's 4+1 Computational Science Program participated in "Supercomputing '09 (SC '09)," an international conference for high performance computing, networking, storage, and analysis. The conference was held from November 13 through November 18, 2009 in Portland, Oregon.

Invitation to the conference is highly competitive, and selection is based upon a detailed review of applications submitted months in advance. Two students, Michael Laielli and Richard Page, and three faculty members, Monir Sharobeam, Bob Olsen, and Russell Manson, formed a team to represent Stockton College.



Richard Page and Michael Laielli

Bob Olsen said, "Computational Science faculty members have been participating in the SC Education Program for the past few years and we have always found the workshops to be invigorating. We are pleased that our program now has majors far enough along in their studies to be included as part of the Stockton SC team. It was especially gratifying to see Michael and Richard participate fully in the conference. I think they enjoyed it as much as Monir, Russell and I did."

Stockton participated in the SC '09 Education Program, which was composed of a series of intensive workshops that were a condensed form of the extensive summer workshop series offered at campuses across the country. The Education Program assists undergraduate faculty

and pre-college educators in integrating high performance computing (HPC) tools, resources, and methods into classrooms and research programs.

The students participated in workshops, discussions, and a contest. During the Education Program poster session the students presented their research entitled “Computational Studies of Temporal and Spatial-temporal Dynamic Systems by Undergraduate Students.” The faculty also presented their research entitled “Curriculum Development and Learning Outcome Assessment in a New Dual-degree Computational Science Program.” In addition to the presentations, the entire Stockton team participated in planning discussions to help organize the SC '10 Education Program.

The featured topics of this year’s conference were sustainability, bio-computing, and the 3D Internet. The guest speakers included former Vice President Al Gore, Intel CTO Justin Rattner, and Institute for Systems Biology co-founder Leroy Hood. Al Gore addressed the issue of sustainability, Justin Rattner outlined the potential of the 3D Internet, and Leroy Hood outlined how bio-computing will transform the medical profession over the next 5 to 10 years.

In his keynote address, Al Gore offered his insight on sustainability and explained, “We have everything we need to solve this crisis, with the possible exception of political will. But ladies and gentlemen, political will is a renewable resource too. The real challenge, here, is to make the climate crisis tangible to everyone, which can be accomplished with supercomputing modeling and simulations.”

The Computational Science program at Stockton was approved by the NJ Commission on Higher Education in February 2006, and was opened for student enrollment for the fall 2007 semester. The Computational Science 4+1 Program is an interdisciplinary field involving applied mathematics, computer science, and other disciplines such as engineering and business that is used for quantitative analysis and predictions through modeling and simulation. The 4+1 indicates that students will earn a bachelor’s and graduate degree in just five years. Stockton’s program specifically accentuates applied work where in-class assignments are supplemented by research projects and internships at local industry to provide for a smooth transition into either a professional or research career. A Computational Science Master’s Program will start this spring.



**About SC '09:** Established 21 years ago, the conference has built a diverse community of participants including researchers, scientists, computing center staff members, IT and data center management, application developers, computer manufacturing personnel, program managers, journalists and congressional staffers. The conference addresses virtually every area of scientific and engineering research, as well as technological development, innovation, and education. Its presentations, tutorials, panels, and discussion forums have included breakthroughs in many areas and inspired new and innovative areas of computing. Over the

next 5 years we expect the extended SC community to play an important role in leading the mainstream of computing into an era of parallelism. Many of the new developments in reconfigurable architectures, memory technologies, languages and tools, real-time high performance computing and other core technologies will debut at the SC conferences.

# # #