CSRC @ SC17

SDSU Computational Sciences Research Center Research Booth

at http://sc17.supercomputing.org (#2215)

Nov 11 - 17, 2017, Denver CO

The CSRC will be hosting a research booth (#2215) at SC17, in Denver, CO (https://edoras.sdsu.edu/~mthomas/sc/csrc/). SC17 programs and activities include a strong technical meeting and associated workshops (with peer-reviewed publications), as well as an industrial exhibit where attendees can visit research, education, and vendor booths. SC is the primary annual gathering for researchers, developers, and commercial companies involved in high-end supercomputing, big data, and high speed networks. Last year, the meeting attendance was over 11,000 attendees, and over 360 exhibitors, including several CSRC faculty and students in presenting several research projects or participating in student programs.

There is a tradition at SC meetings where researchers not only submit and attend technical presentations, but many of the universities and national research laboratories host research booths, which are included as part of the technical exhibits. These booths are used to promote research being conducted, arrange meetings, interact with attendees, and to disseminate information about undergraduate and graduate studies programs. Key goals of this CSRC research booth include:

- Raising awareness about SDSU research and education within the HPC community
- Increasing awareness of High-end computing within the SDSU community.
- Introducing SDSU PhD programs to professors, attendees, and vendors who might be in a position to refer undergraduates
- Increasing the level of participation by SDSU faculty, research and student communities.
- Mentoring SDSU students.
- Serving as a gathering place for SDSU alumni and for local San Diego vendors

SC is a meeting where students are *very strongly encouraged* to participate: as paper or poster presenters; apply for an ACM SIGHPC travel grant (http://www.sighpc.org/resources/travel; or apply to attend as a student volunteer (http://sc17.supercomputing.org/studentssc/student-volunteers/). The SV awards are highly visible, competitive and subject to review and can be listed in a students' resume, travel expense awards (housing, food, conference fees). Participation is also a lot of fun for the students: including dinners, reception job fairs, and educational events are held just for the students. The CSRC strongly encourages student participation by actively supporting them to apply for student positions, to submit presentations,

and to participate in booth activities. Each year SDSU has had several students who have won these competitive awards. This year, Manual Velara is traveling as an SV along with the SCC team. The CRSC welcomes participation by all SDSU students, and provides support to them in several areas:

- Providing information on how to participate in the technical program such as submitting papers and posters, or participating in the doctoral research showcase.
- Helping students apply for SV awards by providing informational email announcements, guiding them throughout the application process, and providing letters of support in conjunction with supervising faculty.
- Mentoring the students on how to attend and participate in these meetings by an in-depth experience of attending and participating in an international scientific meeting;
- Giving students the opportunity to be involved at an even deeper level by spending time in our booth, where they provide information about the program and SDSU to a general public audience.

In 2016, with a generous grant provided by Intel, SDSU competed in the Student Cluster Competition for the first time, and the rewards of competing were extensive and varied. Led by Dr. Mary Thomas, the SCC activity is part of an interdisciplinary effort to expand our students educational experience in the area of high performance computing (HPC). Students participating in the Student Cluster Competition program receive many benefits: in-depth, hands-on experience working with the most advanced high-performance computing (HPC) cluster hardware available; advanced parallel computing technologies; how to run cutting edge scientific applications; travel to an international conference with over 13,000 attendees; attend events and workshops for the SCC teams; compete against 15 teams from around the world; and interact with thousands of attendees in the field of science and technology.

SDSU has again been selected to participate in the 2017 Student Cluster Competition (SCC) in November 2017 at the Supercomputing Conference in Denver, Colorado. This year SDSU will partner with Southwestern Oklahoma State University (SWOSU), IBM and NVIDIA to form a cross-institutional Student Cluster Competition Team. Dr. Chris Paolini worked with IBM to obtain the loan of a 3 node POWER8 cluster which will include GPU cards donated by NVIDAI (10 V100s). The 2017 team includes: SDSU CE & EE students Dane Fairchild, Ryan Grant, Vaugn Ganem Haka, Tuan Nguyen, and Yajush Sharma; and Prabhjyot Singh Saluja from SWOSU. Team sponsors include IBM, NVIDIA, Northwest Grumman, the SDSU College of Sciences, and the CSRC

The team is already planning for SC18 which will be held in Dallas, TX. If you are a student looking for exciting and practical ways of applying and expanding the knowledge you've acquired in the classroom while gaining impressive experience to list on your resume, consider joining the SDSU Student Cluster Competition Team. If you are an individual or company looking for affordable ways to make a positive difference in the development of future leaders in the field of Computer Science, Computer Engineering, and Computational Science, consider making a monetary contribution to the SDSU 2017 Student Cluster Competition team.

For questions or more information about we can help you or your students participate or to represent your program, please contact Dr. Mary Thomas (mthomas@mail.sdsu.edu) or Dr. Jose Castillo (jcastillo@mail.sdsu.edu). See: https://edoras.sdsu.edu/~mthomas/sc/csrc/

http://www.csrc.sdsu.edu

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