

# SC09 Education Program Summer Workshop

## PARALLEL PROGRAMMING AND CLUSTER COMPUTING

**JUNE 7 – JUNE 13, 2009 • KEAN UNIVERSITY  
UNION, NEW JERSEY**

### What are the SC Education Program summer workshops?

The SC Education Program provides week-long, hands-on, tutorial style workshops with topics which cover computational methods in a variety of science disciplines and parallel and cluster computing. The material is designed for undergraduate faculty from a variety of disciplines who would like to add computational methods to their undergraduate teaching.

### Parallel Programming and Cluster Computing

The Parallel Programming and Cluster Computing workshop focuses on techniques and tools for parallel computing. Much of this workshop concentrates on distributed parallelism (MPI); in addition, shared memory parallelism (OpenMP), instruction level parallelism, and hybrid shared/distributed parallelism are also explored. Participants will learn about developing, debugging, profiling and tuning of parallel applications across a variety of architectures, using tools from a variety of sources, including GNU, Intel, TotalView, and the Bootable Cluster CD. The workshop is hands-on, with exercises in both programming and curriculum development.

#### Dates

June 7 – 13  
July 5 – 11  
Aug 9 – 15

#### Location

Kean University – Union, NJ  
Louisiana State University – Baton Rouge, LA  
University of Oklahoma – Norman, OK

### Who is the intended audience?

The SC Education Program is open to undergraduate and graduate educators in all fields of science, technology, engineering, mathematics, humanities, arts and social sciences, especially those from minority-serving institutions. The summer workshops are also open to high school teachers collaborating with college faculty. Faculty are encouraged to mentor and support undergraduate and graduate students by including them as part of their team.

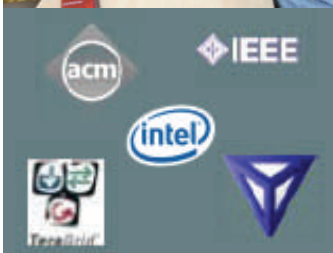
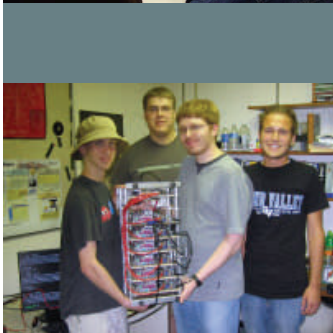
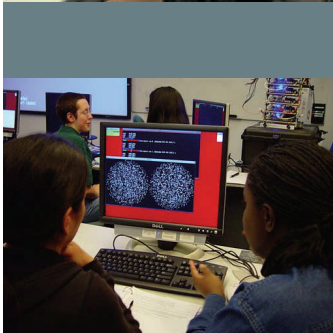
### What is the cost involved with attending?

Participants are asked to provide a fully refundable\* deposit of \$150 (payable by check or money order) and will be required to cover their own travel expenses and incidental expenses. Room, board, all meals except Wednesday lunch and dinner, are covered by the SC Education Program.

### How do I register?

Visit <http://sc-education.org/workshops/> to register.

\* Deposits will be refunded only after complete attendance at every single day of the workshop and submission of all surveys (pre-survey, all daily surveys, and post-survey), in a timely manner. Withdrawing from a workshop without demonstrated special circumstances less than 28 calendar days before the official workshop start date may result in a partial or no refund.



**Register Now: <http://sc-education.org/workshops/>**

# SC Education Program Summer Workshops

Register at <http://sc-education.org/workshops/>

## → Introduction to Computational Thinking

### Dates

May 25 – 30

July 5 – 11

August 2 – 8

### Locations

Calvin College in Grand Rapids, MI

Atlanta University Center in Atlanta, GA

University of Arkansas in Fayetteville, AR

## → Parallel Programming and Cluster Computing

### Dates

June 7 – 13

July 5 – 11

August 9 – 15

### Locations

Kean University in Union, NJ

Louisiana State University in Baton Rouge, LA

University of Oklahoma in Norman, OK

## → Computational Biology for Biology Educators

### Dates

June 7 – 13

### Locations

University of California, Merced in Merced, CA

## → Computational Chemistry for Chemistry Educators

### Dates

May 17 – 23

### Locations

Oklahoma State University in Stillwater, OK

## → Computational Engineering for Engineering Educators

### Dates

July 12 – 18

### Locations

Ohio Supercomputer Center at OSU in Columbus, OH

## → Computational Thinking in the Grades 6-12 Classroom

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### Dates

July 12 – 18

### Locations

University of Florida in Gainesville, FL

This list is subject to change as more workshops are added. See the website at <http://sc-education.org/workshops/> for up-to-date information.