

# Organizers Announce Field for CSIDC 2006

**S**tudent teams from colleges and universities around the world are battling for a coveted top 10 berth at the June 2006 Computer Society International Design Competition Finals in Washington, D.C. Truly international in scope, CSIDC now draws nearly 150 entries from institutions located in more than 50 countries, up from fewer than 50 entries in 2000, the competition's first year.

Contest organizers stress the importance of teamwork to success. Said CSIDC 2006 Chair Alan Clements of the UK's University of Teesside, "CSIDC magnifies the creativity of a group of students by enabling them to get the best out of each other by working intensively as a group for several months. By the end of the project, most of the successful teams in CSIDC are astonished by how much they have achieved."

## COMPETITION

Teams competing in CSIDC use a PC, laptop, handheld computer, or similar device and apply additional low-cost hardware/software to create a computer-based solution to a real-world problem. The theme of CSIDC 2006 is "Preserving, Protecting, and Enhancing the Environment." North Carolina State University, the winner of CSIDC 2005, met last year's challenge of "Going Beyond the Boundaries" by creating *NEAT: Networks for Endangered Animal Tracking*, a GPS-based wireless sensor system dedicated to more effective wildlife management.

## TIMELINE

CSIDC teams work over the course of an academic year to build their systems, following a process that mimics the evolution of a real commercial product. By mid-January, each team is required to supply a working title for its project. By mid-February, each team must submit an interim report to a panel of volunteer CSIDC judges. Judges from academia and industry evaluate the reports for adherence to contest rules and for competitive viability. Selected teams will be invited to



prepare a final report by 16 April.

After reviewing the final reports, CSIDC officials will announce the top 10 projects on 14 May, inviting four members from each of the 10 teams and their faculty mentors to participate in the 30 June to 2 July CSIDC 2006 World Finals

in Washington, D.C.

At the CSIDC World Finals, teams demonstrate their projects in a live, interactive judging session, as well as in a formal multimedia presentation. Judges review the finalists' entries for originality, social usefulness, technical excellence, feasibility and practicality, evidence of teamwork, system integrity, and overall quality, including the caliber of presentation materials and delivery.

## PRIZES

The first-place finishers at CSIDC World Finals will split a \$20,000 cash prize. Members of the second- and third-place teams will share \$15,000 and \$10,000 cash prizes, respectively. The remaining seven teams will each receive an honorable mention and \$2,500.

In addition to the main awards, teams that place in the top 10 at CSIDC 2006 will be eligible for two \$3,000 special prizes. The Microsoft Award for Software Engineering recognizes the project that best exemplifies the application of good software engineering principles to

## Computer Society Press Seeks Book Series Editors

The IEEE Computer Society Press Operating Committee is seeking volunteer editors for an emerging technologies book series and a practitioner-oriented book series.

The emerging technologies series focuses on materials that address innovative technology trends. The practitioner book series provides advice targeted to all levels of students, professionals, and experts as well as guidance on technical and career issues.

The responsibilities of a series editor include soliciting book proposals and working with volunteer authors to maintain a six-title queue.

Interested candidates should e-mail Computer Society staff liaison Deborah Plummer at [dplummer@computer.org](mailto:dplummer@computer.org) and Don Shafer, editor in chief of the Computer Society Press, at [donschafer@ieee.org](mailto:donschafer@ieee.org). Applications will be accepted until the positions are filled.



## CSIDC Participating Teams for 2006

### A

American University of Sharjah (2)  
Ashesi University College

### B

Babasaheb Ambedkar Marathwada University  
Banaras Hindu University  
Bangladesh University of Engineering and Technology  
Beijing Jiaotong University  
Beijing University of Aeronautics and Astronautics  
Beijing University of Posts and Telecommunications (3)  
Beijing University of Technology (4)  
Belgrade Business School (3)  
Birla Institute of Technology and Science (2)  
Boston University  
Bradley University  
Brigham Young University, Hawaii

### C

California State University, Dominguez Hills  
California State University, Long Beach (5)  
Capella University  
Chiang Mai University

### D

DePaul University  
DeVry Institute of Technology, Calgary  
Dhirubhai Ambani Institute of Information and Communication Technology  
Dwarkanadas J. Sanghvi College of Engineering

### E

East Stroudsburg University  
Eastern Mediterranean University

### F

Florida Gulf Coast University

### G

Georgia State University

### I

ICFAI Institute of Science and Technology (3)

Indian Institute of Technology, Guwahati (2)  
Indian Institute of Technology, Roorkee  
Indira Gandhi Institute of Technology  
Industrial University of Santander (2)  
Iowa State University (2)

### J

Jaypee Institute of Information Technology

### K

Kathmandu Engineering College (2)  
Kharkiv National University of Radioelectronics  
Kwame Nkrumah University of Science and Technology

### L

Lahore University of Management Sciences (5)  
Ling Tung University

### M

McGill University  
Medgar Evers College  
Michigan Technological University  
Military Institute of Engineering, Brazil (2)

### N

Nantes Atlantic School of Design  
Nanyang Technological University  
National Institute of Technology, India (2)  
National Power Training Institute, India (2)  
National University of San Marcos  
Nepal College of Information Technology  
Nepal Engineering College  
North Carolina State University

### O

Ohio Northern University  
Oregon State University

### P

Paulist University of Júlio de Mesquita  
Polytechnical University Bucharest (2)  
Polytechnical University of Timisoara  
Pontifical University of Bolivariana  
Poznan University of Technology (3)  
Purdue University, Calumet

### Q

Queensborough Community College

### S

Sathyabama University  
Shanghai Jiao Tong University  
Slovak University of Technology  
Southeast University  
Sri Sivasubramaniya Nadar College of Engineering (5)  
Sultan Qaboos University

### T

Tajen University  
Technical University of Braunschweig  
Technical University of Iasi (2)  
Thadomal Shahani Engineering College  
Transylvania University of Brasov  
Tribhuvan University, Pulchowk

### U

University of Advancing Technology  
University of Craiova  
University of Engineering and Technology, Lahore  
University of Engineering and Technology, Taxila (2)  
University of Guelph  
University of Hungkuang  
University of Jordan (4)  
University of Maine  
University of Michigan  
University of Missouri  
University of Nebraska  
University of Palermo  
University of São Paulo  
University of Science and Technology of China (2)  
University of Technology, Jamaica

### V

Vasavi College of Engineering (2)  
Vivekanad Education Society Institute of Technology

### W

Waran Research Foundation  
Wharton County Junior College (2)

### X

Xiamen University

the design and testing of a device prototype. The Microsoft Multimedia Award goes to the team whose presentation makes the most interesting, innovative, exciting, and appropriate use of multimedia.

CSIDC is in the final year of a three-year, \$1 million sponsorship agreement with Microsoft, and teams participating in the Microsoft Windows Embedded Student Challenge can register for CSIDC as well. ■

# CSDP Expands to Testing Sites Worldwide

The IEEE Computer Society Certified Software Development Professional program is expanding to exam administration centers in 134 countries around the globe. The CSDP certification program is unique in the software engineering field, offering benefits that range from exposure to recent advances in engineering theory to gains in employment distinction and career opportunities.

## CSDP EXAM HIGHLIGHTS

Product-specific requirements form the foundation of many recent technical certification programs. For example, an expert in Novell, Microsoft, or Linux systems can seek a certificate that reflects having expertise in that particular environment.

Other technical certification programs are often driven by project- or occupation-specific requirements. In contrast, the IEEE Computer Society has recognized the need for a broad, objective certification program that acknowledges a level of advanced skill in all facets of software development.

The CSDP examination consists of 180 multiple-choice questions gleaned from 11 topic areas, including software construction, software maintenance, and software quality. Exam questions are based on concepts that should be familiar to software engineers with six or more years of professional experience.

CSDP candidates must hold a baccalaureate degree and must have at least two years of software engineering experience within the four-year period prior to the application to test. Candidates must also have a total of at least 9,000 hours of relevant experience. CSDP certificate holders are required to renew their certification every three years by completing 30 units of professional development work and submitting a \$150 recertification fee.

For candidates who would like additional preparation prior to taking the exam, the Computer Society also offers a CSDP training course, Software Engineering Overview, in its Distance Learning Campus. The course, available to members for \$395 at

[www.computer.org/certification/DistanceLearning](http://www.computer.org/certification/DistanceLearning), provides a comprehensive review of essential software engineering principles.

## APPLY TO TEST

Applications for the spring 2006 testing window, which is open from 1 April to 30 June, are due by **1 April**. For the fall 2006 testing window, which is open from 1 September to 30 November, applications are due by **1 September**. CSDP application and examination fees are \$450 for IEEE or Computer Society members and \$550 for nonmembers. Recent federal action has classified CSDP testing fees as reimbursible to veterans under the GI Bill.

CSDP examinations are administered by Prometric, which performs live, computer-based testing at hundreds of locations throughout the world.

Further application information is available at [www.computer.org/certification/apply.htm](http://www.computer.org/certification/apply.htm). ■

## 2006 IEEE Medal of Honor Goes to Georgia Tech's James D. Meindl

The IEEE has bestowed its prestigious 2006 Medal of Honor upon James D. Meindl, the Joseph M. Petit Chair Professor of Microelectronics at the Georgia Institute of Technology. Meindl's award cites his "pioneering contributions to microelectronics, including low-power, biomedical, physical limits, and on-chip interconnect networks."

"Dr. Meindl is a giant in the field of microelectronics and has been a leader in the semiconductor field for over 40 years," said IEEE President Michael Lightner. "His pioneering research in the area of gigascale silicon technology integration and his leadership in developing low-power integrated circuits and sensors are only two of his invaluable contributions to the field of microelectronics."

Senior vice president for academic affairs and provost of Rensselaer Polytechnic Institute from 1986 to 1993, Meindl worked at Stanford University from 1967 to 1986 as the John M. Fluke professor of electrical engineering, associate dean for research, director of Stanford's Electronics Laboratories, founding director of the Center for Integrated Systems, and founding director of the Integrated Circuits Laboratory.

Meindl's previous distinctions include the 1989 IEEE Solid-State Circuits Medal for "contributions to solid-state circuits and solid-state circuit technology" and the 1990 IEEE Education Medal "for establishment of a pioneering academic program for the fabrication and application of integrated circuits."

A Fellow of the IEEE, Meindl is also a Fellow of the American Association for the Advancement of Science and a member of the National Academy of Engineering.

Nominations for the 2007 IEEE Medal of Honor are due by **1 July**. Nomination forms are available at [www.ieee.org/about/awards/sums/mohsum.htm](http://www.ieee.org/about/awards/sums/mohsum.htm).

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# Cray, Fernbach, and Undergraduate Teaching Award Nominations Due by 31 July

Each fall, the IEEE Computer Society grants three prestigious awards that recognize individuals and faculty groups for making outstanding contributions to computer science, engineering, and education.

Supercomputing pioneer Seymour Cray is legendary for his unconventional approach to problem solving. The IEEE Computer Society Seymour Cray Computer Science and Engineering Award recognizes individuals whose innovative contributions to high-performance computing systems best reflect Cray's creative spirit. Recipients of the Cray Award also receive a crystal memento, an illuminated certificate, and a \$10,000 honorarium.

Sidney Fernbach was a pioneer in the use of high-performance computers for solving large computational problems. In 1992, the Computer Society established the Sidney Fernbach Memorial Award to recognize individuals who have made notable strides in developing applications for high-performance computing. Nominations for the honor are evaluated by awards committees associated with SC 2006. The Fernbach award winner receives a certificate of recognition and a \$2,000 honorarium.

Winners of both the Cray and Fernbach awards will accept their honors during a special awards ceremony at the SC 2006 supercomputing conference.

The Computer Society also awards the annual Undergraduate Teaching Award in Computer Science & Engineering to a professor or group of professors who demonstrate an enduring and significant commitment to undergraduate education through teaching and professional service. The award can also acknowledge efforts by professors to increase the Society's visibility. Honorees receive a plaque and a \$2,000 honorarium.

Computer Society awards recognize technical achievements, contributions to engineering education, and service to the Society or the profession. Nominations for the Fernbach, Cray, and Undergraduate Teaching Awards are due by 31 July. Nominations for most other Society awards have a 31 October deadline.

To obtain nomination materials for any IEEE Computer Society award, visit [www.computer.org/awards](http://www.computer.org/awards).

## Merwin Scholarship Applications Due by 31 May

The 2006 Richard E. Merwin Student Scholarship, named in honor of a past president of the Society, recognizes leaders in Computer Society student branch chapters who show promise in their academic and professional efforts. The IEEE Computer Society encourages active members of its student branches to apply for up to 10 scholarships of \$4,000 each, paid in four quarterly installments starting in September.

To be eligible, applicants must be active members of a Computer Society student branch chapter. They must also maintain a minimum 2.5 GPA as a full-time junior, senior, or graduate student in computer science, computer engineering, or electrical engineering.

Winners of the Merwin Scholarship serve as IEEE Computer Society Student Ambassadors for the particular IEEE region to which they belong. Student Ambassadors collect and disseminate information to Computer Society student chapters in their own regions and serve as a liaison to the Chapters Activities Board. Merwin Scholarship applications are due by 31 May.

Other awards and scholarships offered to students by the Computer Society include the Lance Stafford Larson best paper contest and the Upsilon Pi Epsilon/Computer Society Award for Academic excellence, which is administered jointly by the IEEE Computer Society and the Upsilon Pi Epsilon international honor society.

For more information about Computer Society student scholarships and awards, visit [www.computer.org/students/schlrshp.htm](http://www.computer.org/students/schlrshp.htm).

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