

USENIX notes

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Members of the USENIX Association receive the following benefits:

FREE SUBSCRIPTION to *;login:*, the Association's magazine, published six times a year, featuring technical articles, system administration articles, tips and techniques, practical columns on such topics as security, Perl, networks, and operating systems, book reviews, and summaries of sessions at USENIX conferences.

ACCESS TO ;LOGIN: online from October 1997 to this month:
www.usenix.org/publications/login/.

ACCESS TO PAPERS from USENIX conferences online:
www.usenix.org/publications/library/proceedings/

THE RIGHT TO VOTE on matters affecting the Association, its bylaws, and election of its directors and officers.

DISCOUNTS on registration fees for all USENIX conferences.

DISCOUNTS on the purchase of proceedings and CD-ROMs from USENIX conferences.

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USENIX BOARD OF DIRECTORS

Communicate directly with the USENIX Board of Directors by writing to board@usenix.org.

PRESIDENT

Michael B. Jones,
mike@usenix.org

VICE PRESIDENT

Clem Cole,
clem@usenix.org

SECRETARY

Alva Couch,
alva@usenix.org

TREASURER

Theodore Ts'o,
ted@usenix.org

DIRECTORS

Matt Blaze,
matt@usenix.org

Rémy Evard,
remy@usenix.org

Niels Provos,
niels@usenix.org

Margo Seltzer,
margo@usenix.org

2008 ELECTION OF THE USENIX BOARD OF DIRECTORS

ELLIE YOUNG

USENIX Executive Director

The biennial election for officers and directors of the Association will be held in the spring of 2008. A report from the Nominating Committee will be emailed to USENIX members and posted to the USENIX Web site in December 2007 and will be published in the February 2008 issue of *;login:*.

Nominations from the membership are open until January 9, 2008. To nominate an individual, send a written statement of nomination signed by at least five (5) members in good standing, or five separately signed nominations for the same person, to the Executive Director at the Association offices, to be received by noon PST, January 9, 2008. Please prepare a plain-text Candidate's Statement and send both the statement and a 600 dpi photograph to jel@usenix.org, to be included in the ballots.

Ballots will be mailed to all paid-up members in mid-February 2008. Ballots must be received in the USENIX offices by March 19, 2008. The results of the election will be announced on the USENIX Web site by April 1 and will be published in the June issue of *;login:*.

The Board consists of eight directors, four of whom are "at large." The others are the president, vice president, secretary, and treasurer. The balloting is preferential: those candidates with the largest numbers of votes are elected. Ties in elections for directors shall result in run-off elections, the results of which shall be determined by a majority of the votes cast. Newly elected directors will take office at the conclusion of the first regularly scheduled meeting following the election, or on July 1, 2008, whichever comes earlier.

THANKS TO OUR VOLUNTEERS

ELLIE YOUNG
USENIX Executive Director

As many of our members know, the success of USENIX is attributable to a large number of volunteers, who lend their expertise and support for our conferences, publications, and member services. They work closely with our staff in bringing you the best there is in the fields of systems research and system administration. Many of you have participated on program committees, steering committees, and subcommittees, as well as contributing to this magazine. We are most grateful to you all. I would like to make special mention of the following individuals who made significant contributions in 2007.

The program chairs of our 2007 conferences:

Andrea C. Arpaci-Dusseau and Remzi H. Arpaci-Dusseau, FAST '07

Ric Wheeler, 2007 Linux Storage & Filesystem Workshop

Brian Cooper and Nick Feamster, NetDB '07

Jeff Chase and Ira Cohen, SysML07

Niels Provos, HotBots '07

Hari Balakrishnan and Peter Druschel, NSDI '07

Galen Hunt, HotOS XI

Steven M. Bellovin, SRUTI '07

Jeff Chase and Srinivasan Seshan, 2007 USENIX Annual Technical Conference

Dan Boneh, Tal Garfinkel, and Dug Song, WOOT '07

Ray Martinez and David Wagner, EVT '07

Terry V. Benzel and George Kesidis, DETER 2007

Niels Provos, 16th USENIX Security Symposium

Betsey Nichols and Gunnar Peterson, MetriCon 2.0

Trent Jaeger, HotSec '07

The 2007 Linux Kernel Summit Committee members

Paul Anderson, LISA '07

Invited Talks/special track chairs:

Bill Aiello, Angelos Keromytis, and

Gary McGraw, Invited Talks Coordinators for USENIX Security '07

Rudi Van Drunen and Doug Hughes, Invited Talks Coordinators for LISA '07

Philip Kizer, Guru Is In Coordinator for LISA '07

Adam Moskowitz, Hit the Ground Running Track Coordinator for LISA '07

Lee Damon, Workshops Coordinator for LISA '07

Brent Hoon Kang, WiPs and Posters Coordinator for LISA '07

Some other major contributors:

Balachander Krishnamurthy for his continued efforts in obtaining sponsorships and providing guidance for SRUTI

Alva Couch for liaising with VEE and HotAC, co-sponsored by USENIX

Avi Rubin, Dan Wallach, and ACCURATE for helping organize the Electronic Voting Technology Workshop

Dan Geer for steering the Workshop on Security Metrics

Peter Honeyman for his efforts in outreach to the international community, e.g., the SANE and Middleware conferences

Michael B. Jones for serving as liaison to the Computing Research Association

Matt Blaze, Clem Cole, Alva Couch, Rémy Evard, Michael B. Jones, Niels Provos, Margo Seltzer, and Theodore Ts'o for their service on the USENIX Board of Directors in 2007

Mike Jones and Dan Geer for serving on the USENIX Nominating Committee

Clem Cole, Keith Packard, John Gilmore, Steven Bourne, Jim McGinness, Niels Provos, Timothy Lord, and Jeff Bates for serving on the USENIX awards committee

Rob Kolstad and Don Piele for their work with the USA Computing Olympiad, co-sponsored by USENIX

Mark Burgess, Richard Chycoski, Esther Filderman, Cat Okita, and Dustin Puryear for serving on the SAGE Awards Committee

USACO UPDATE

ROB KOLSTAD
USACO Head Coach

USENIX is the premier sponsor of the USA Computing Olympiad, one of six prominent international Olympiads for pre-college students, a set that also includes Mathematics, Physics, Chemistry, Biology, and Astronomy. (Others, such as Computational Linguistics, Geography, and Philosophy are as yet in their infancy.)

The USA Computing Olympiad has four major goals: (1) to provide pre-college students around the world with opportunities to sharpen their computer programming skills to enable them to compete successfully at the international level; (2) to enhance the quality of pre-college computer education by providing students and teachers with challenging problems, training materials, and competitions that emphasize algorithm development and problem-solving skills; (3) to recognize those students with outstanding skills in computer science and encourage them to pursue further opportunities in the profession; and (4) to provide educational, motivational, and competitive materials in the form of programming competitions and Web-based training to students in the United States and over 75 other countries.

Most of these goals one might guess a high-school level computing organization might provide. Probably the most interesting point is the international flavor of the USACO. We, almost alone in the world, believe that the Internet's ubiquity enables us to share our ideas and work with students throughout the globe rather than just those in our own country. This shows up very clearly in our contest results. (See Figure 1.) U.S. students comprise only 21.2% of participants. It is worth noting that this is also a consequence of U.S. students' current lack of interest in pursuing careers in computer science.

Note the participation of Iran (29 contestants) and even Cuba (2 contestants). China, of course, is the big pow-

erhouse. They win four gold medals at the international competition almost every year. In countries like China and Poland, becoming a computer programming expert is often the ticket to a very successful career; they are less concerned than U.S. students about the job market.

FIGURE 1. Participation by Country

225	USA	10	ZAF	2	CUB
199	CHN	9	LTU	2	GRC
78	ROM	8	MEX	2	KOR
50	BLR	7	BRA	2	MDA
47	BGR	7	SVK	2	POR
37	CAN	7	YUG	2	SYR
33	GEO	6	ARM	2	THA
29	IRN	6	FRA	1	AZE
29	POL	5	LVA	1	BIH
24	IDN	5	SVN	1	CHE
24	VNM	5	TKM	1	CZE
19	UKR	4	ARE	1	FIN
17	EGY	4	ARG	1	HKG
17	TWN	4	ESP	1	MAC
16	IND	4	NED	1	MAR
15	DEU	4	SGP	1	MUS
14	TUR	3	AUT	1	MYS
13	HRV	3	EST	1	PAK
12	KAZ	3	MNG	1	SWE
12	RUS	3	PHL	1	TTO
11	BGD	2	AUS		

Online contests are offered monthly through the school year, culminating in the U.S. Open in April. Students compete for recognition (on the competition results), satisfaction, and to join the USA Invitational Computing Olympiad (more on that later). We also offer guided training (<http://train.usaco.org>), forcing students to complete tasks before moving on to the next section. This eliminates the observed problem of students skipping the more challenging tasks. Supplemented by a set of chapters on algorithmic programming, the 97 exercises provide perhaps 200 hours of online training. Another set of 300+ tasks is in final preparation for release as an enhanced training activity.

Perhaps surprisingly, the USACO does not train those who have no background in programming. Rectifying this omission is high on my priority list, but it will probably require a different set of volunteers.

The USA Invitational Computing Olympiad is a primary motivator for the 50 or so U.S. students who compete in the Gold division. About 15 students are invited to a college campus for a week of competitions, training, and fellowship. The 22 hours of competition determine the four members of the USA international traveling team.

Lately, the USACO has sent students only to the main international competition, the UNESCO-fostered International Olympiad on Informatics. This year's IOI was held in Zagreb, Croatia. I presented a summary of the USACO at the mini-conference there and will be in charge of submission grading for 2008's IOI in Egypt.

Two of our competitors, John Pardon and Matt McCutchen, earned gold medals, with John placing fifth in the world and Matt placing ninth. Ye Wang, exchange student from China, earned a silver medal, and junior David Benjamin (with two more years of eligibility) won a bronze medal. John has matriculated at Princeton; Matt is at the University of Virginia. Matt points out that "USACO training enabled me to skip the algorithmic part of undergraduate school and move straight into graduate courses during my first year." Matt is a talented

programmer who also works in the filesystem code of the Linux kernel, testing new ideas on file ownership and access control.

All of these activities require a tremendous amount of manpower. Happily, former competitors assist Director Don Piele (emeritus professor at U. Wisconsin—Parkside) and myself as Head Coach. These top-notch coaches including Brian Dean, who recently finished his Ph.D. at MIT and is now a faculty member at Clemson. Percy Liang completed his Master's Degree at MIT and has journeyed to U.C. Berkeley for his Ph.D. Alex Schwendner joined us in Colorado after finishing his second year at MIT. Canada's 19-year-old Richard Peng created all the contests for the camp; he has returned for his second year at U. Waterloo. Another dozen associate coaches help keep the USACO contests running smoothly, including coaches at U. Waterloo in Canada and the University of Cape Town in South Africa. Many others contribute to creating and vetting the huge number of contest tasks the USACO consumes each year (54 tasks for the regular season; another 25 to 30 for the invitational camp).

We could not run the USACO without USENIX's sponsorship. Many thanks!



Ye Wang, David Benjamin, John Pardon, and Matt McCutchen show off their medals from the International Computing Olympiad in Zagreb, Croatia