SIGOPS Annual Report 2009

Fiscal Year July 2008-June 2009
Submitted by Doug Terry, SIGOPS Chair

Overview

SIGOPS continues to be a vibrant community of people with interests in "operating systems" in the broadest sense, including topics such as distributed computing, storage systems, security, concurrency, middleware, mobility, virtualization, networking, datacenter software, and Internet services. We sponsor a number of top conferences, provide travel grants to students, present yearly awards, disseminate timely information, and collaborate with other SIGs on important programs for computing professionals.

Highlights from the past year include:

- The current officers agreed to have their terms extended by two years, through June 2011, thereby avoiding the need for new elections. The officers remain Doug Terry as Chair, Frank Bellosa as Vice Chair, Jeanna Matthews as Treasurer (and Editor of our newsletter), and Stefan Saroiu as the Information Director.
- Plans for SOSP, our flagship conference, were completed by Jeanna Mathews, the General Chair, and Tom Anderson, the Program Chair. This conference will be held in Big Sky, Montana, on October 11-14, 2009. New this year, a number of SIGOPS-sponsored workshops are being held in conjunction with SOSP, including workshops on cloud computing, storage and file systems, power aware computing, systems for developing regions, and diversity.
- Our European chapter elected new officers and held its annual EuroSys conference in Nuremberg, Germany on April 1-3; Gustavo Alonso was elected Chair with Tim Harris as Vice Chair.
- A new ACM Symposium on Cloud Computing that is jointly sponsored by SIGMOD and SIGOPS was proposed with plans to co-locate the first instance with SIGMOD 2010.
- The new SIGOPS web site, http://www.sigops.org/, went live with a major redesign thanks to Stefan Sariou.

Awards

Two of the major ACM awards were presented this year to members of the SIGOPS community:

- Barbara Liskov received the A. M. Turing Award.
- Dawson Engler received the Grace Murray Hopper Award.

SIGOPS presents several awards on a yearly basis, and here are this past year's recipients:

- Peter Druschel received the Mark Weiser Award, for creativity and innovation in operating systems research, at the Symposium on Operating Systems Design and Implementation (OSDI), which is sponsored by USENIX in cooperation with SIGOPS.
- The SIGOPS Hall of Fame Award, which recognizes the most influential systems papers, was presented to five papers:

  - John H. Howard, Michael L. Kazar, Sherri G. Menees, David A. Nichols, M. Satyanarayanan, Robert N. Sidebotham, and Michael J. West, "Scale and Performance in a Distributed File System," Proceedings of the Eleventh ACM Symposium on Operating Systems Principles (SOSP), November 1987, Austin TX, USA.

  - Richard Rashid, Avadis Tevanian, Michael Young, David Golub, Robert Baron, David Black, William Bolosky, and Jonathan Chew, "Machine-Independent Virtual Memory Management for Paged Uniprocessor and Multiprocessor Architectures," Proceedings of the Second Architectural Support for Programming Languages and Operating Systems (ASPLOS), October 1987, Palo Alto CA, USA.

  - Andrew D. Birrell, Roy Levin, Roger M. Needham, and Michael D. Schroeder, "Grapevine: An Exercise in Distributed Computing," Proceedings of the Eighth ACM Symposium on Operating Systems Principles (SOSP), December 1981, Pacific Grove CA, USA.

  - Edouard Bugnion, Scott Devine, and Mendel Rosenblum, "Disco: Running Commodity Operating Systems on Scalable Multiprocessors," Proceedings of the Sixteenth ACM Symposium on Operating Systems Principles (SOSP), October 1997, Saint Malo, France.

  - Andre Bensoussan, Charlie T. Clingen, Robert C. Daley, "The Multics Virtual Memory: Concepts and Design," Communications of the ACM 15(5):308-318, May 1972.

Programs and Services

Professional SIGOPS membership dues remain at $15, and student membership is just $5 per year. We started offering a "member plus" package (for $20) for those who wish to continue receiving printed proceedings for the SOSP, ASPLOS, and EuroSys conferences; thus far, demand for this package is low, but this could partly stem from it not being well advertised.

Several widely respected conferences were sponsored or co-sponsored by SIGOPS this year. This includes the *International Conference on Architectural Support for Programming Languages and Operating Systems* (ASPLOS), co-sponsored with SIGARCH and SIGPLAN, the *Symposium on Principles of Distributed Computing* (PODC), co-sponsored with SIGACT, the *International Conference on Embedded Networked Sensor Systems* (SenSys), co-sponsored with SIGCOMM, SIGARCH, SIGBED, SIGMOBILE, and SIGMETRICS, the *International Conference on Virtual Execution Environments* (VEE), co-sponsored with SIGPLAN, and the *EuroSys Conference*.

SIGOPS encourages participation in conferences and career building activities for young members of the community. For example, substantial funding was provided this year as travel grants for students to attend conferences and diversity workshops, with many of these grants targeted at women and underrepresented minorities.

SIGOPS also publishes a quarterly newsletter, *Operating Systems Review*, which focuses on specific research topics or research institutions, manages an electronic mailing list, which is used for announcements, and maintains a web site.

Key Issues

Like other SIGs, SIGOPS faces the issue of membership retainment and growth. Several activities are underway. One is providing travel grants to conferences so that students can experience the benefits of belonging to the SIGOPS community. Another is providing the opportunity for members of our European chapter to automatically become SIGOPS members through a joint registration process. Third, we have set low yearly membership dues.

Another issue of importance is global outreach. A few years ago, SIGOPS started a yearly systems conference in Europe called EuroSys, which has developed a good reputation and is doing well. We are now exploring holding conferences in other parts of the world, particularly Asia and South America.