

# OPERATING SYSTEMS REVIEW

A Publication of the ACM Special Interest Group on Operating Systems

---

## Chair

Keith Marzullo  
Computer Science & Engineering  
U.C. San Diego  
La Jolla, CA 92093-0114  
USA  
+1-858-534-3729  
([marzullo@cs.ucsd.edu](mailto:marzullo@cs.ucsd.edu))

## Information Director

Geoffrey M. Voelker  
Computer Science & Engineering  
U. C. San Diego  
9500 Gilman Dr., MC 0114  
La Jolla, CA 92093-0114 USA  
+1-858-822-3323  
([voelker@cs.ucsd.edu](mailto:voelker@cs.ucsd.edu))

## Vice Chair

Gilles Muller  
École des Mines de Nantes  
4, rue Alfred Kastler – BP 20722  
44307 Nantes Cedex 3  
FRANCE  
+33-2-51-85-82-04  
([gilles.muller@emn.fr](mailto:gilles.muller@emn.fr))

## Secretary-Treasurer

## Editor of Operating System

## Review

Jeanna Matthews  
Department of Computer Science  
Clarkson University  
8 Clarkson Avenue, MS 5815  
Potsdam, NY 13699  
USA  
+1-315-258-6288  
([jmm@clarkson.edu](mailto:jmm@clarkson.edu))

---

OPERATING SYSTEMS REVIEW is a publication of the ACM Special Interest Group on Operating Systems (SIGOPS), whose scope of interest includes: Computer operating systems and architecture for multiprogramming, multiprocessing, and time sharing; resource management; evaluation and simulation; reliability, integrity, and security of data; communications among computing processors; and computer system modeling analysis.

Membership in SIGOPS (at \$20 per annum) is open to ACM members and associate members, and student members (at \$8 per annum). Non-members of ACM may subscribe to OPERATING SYSTEMS REVIEW at \$30 per year. All SIGOPS members receive OPERATING SYSTEMS REVIEW. SIGOPS membership application forms are available from ACM Headquarters, 1515 Broadway, New York, NY 10036, telephone +1-212-869-7440. Changes of address and other matters pertaining to the SIGOPS mailing list should be directed to ACM Headquarters, not to any of the SIGOPS officers.

**Contributions to OSR** Several types of contributions to OSR are solicited from the operating systems community. First, many issues of OSR will be organized around a special topic or theme. Guest editors are sought to solicit, review, select and coordinate articles related to the special topic. If you are interested in suggesting a special topic or in serving as a guest editor, contact the OSR editor. Second, contributions related to upcoming special topics are requested. Such contributions should be sent to the guest editor for the issue of interest. Calls for participation in upcoming special topics issues will be posted on the OSR web page (<http://www.acm.org/sigops/osr.html>) and also announced via the SIGOPS mailing list. Finally, individual submissions not related to specific special topics are welcome. Proposals for individual submissions should be sent to the OSR editor for review and to discuss possible publication dates. Each proposal should clearly say how the submission would be of interest to the SIGOPS community. **The SIGOPS conference proceedings will be mailed as the December issue in odd-numbered calendar years, and the ASPLOS conference proceedings will be mailed in even-numbered calendar years.**

OPERATING SYSTEMS REVIEW (ISSN 0163-5980) is published five times a year (January, April, July, October, and December) by the Association for Computing Machinery, 1515 Broadway, New York, NY 10036. Periodicals postage paid at New York, NY 10001, and at additional mailing offices. POSTMASTER: Send address changes to OPERATING SYSTEMS REVIEW, ACM, 1515 Broadway, New York, NY 10036.

# Upcoming Events in Operating Systems Research

Gilles Muller  
Gilles.Muller@emn.fr

Compiled 21 June 2006

This is a summary of upcoming (i) submission deadlines (ii) meetings (conferences, workshops, schools, etc.) and in the area of Operating Systems research. I provide this summary in every issue of

OSR.

The information I keep is very terse: just the title, date and place of the event, and a few URLs.

## Deadlines for July 2006

**StorageSS'2006: 2nd International Workshop on Storage Security and Survivability**  
October 30, 2006; Alexandria, Virginia, USA;  
*Deadline: July 14, 2006*  
<http://www.storagess.org/>

**HotDep'2006: 2nd Workshop on Hot Topics in System Dependability**  
November 8, 2006; Seattle, WA, USA;  
*Deadline: July 15, 2006*  
<http://www.usenix.org/events/hotdep06/cfp/>

**ANCS'2006: 2nd Symposium on Architectures for Networking and Communications Systems**  
December 3-5, 2006; San Jose, California, USA;  
*Deadline: July 17, 2006*  
<http://www.ancsconf.org/>

**Opodis'2006: 10th International Conference On Principles Of Distributed Systems**  
December 18-20, 2006; Saint-Emilion, France;  
*Deadline: July 17, 2006*  
<http://www.opodis.net>

## Deadlines for August 2005

**XHPC'2006: Workshop on XEN in High-Performance Cluster and Grid Computing Environments**  
December 1-4, 2006; Sorrento, Italy;  
*Deadline: August 4, 2006*  
<http://xhpc.ai.wu-wien.ac.at/ws/>

**Operating Systems Review**  
*Deadline: 15 Feb, 15 May, 15 Aug, 15 Nov*  
<http://www.acm.org/sigops/osr.html>

## Deadlines for September 2005

**PerCom'2007: 5th Annual IEEE International Conference on Pervasive Computing and Communications**  
March 26-30, 2007; White Plains, NY, USA;  
*Deadline: September 1, 2006*  
<http://www.cse.psu.edu/~hurson/percom2007/>

**FAST'2007: 5th USENIX Conference on File and Storage Technologies**  
February 13-16, 2007; San Jose, CA, USA;  
*Deadline: September 6, 2006*

<http://www.usenix.org/events/fast07/>

**EuroSys'2007: 2nd Eurosys Conference**  
March 21-23, 2007; Lisbon, Portugal;  
*Deadline: September 16, 2006*  
<http://www.gsd.inesc-id.pt/conference/EuroSys2007/>

## Meetings for July 2006

**ICDCS'2006: 26th International Conference on Distributed Computing Systems**  
July 4-7, 2006; Lisboa, Portugal;  
<http://icdcs2006.di.fc.ul.pt>

**SRUTI'2006: 2nd Workshop on Steps to Reducing Unwanted Traffic on the Internet Workshop**  
July 7, 2006; San Jose, CA, USA;  
<http://www.usenix.org/events/sruti06/>

**ECRTS'2006: 18th Euromicro Conference on Real-Time Systems**  
July 5-7, 2006; Desden, Germany;  
<http://ecrts06.tudos.org/>

**SANSO'2006: 2nd International Workshop on System and Networking for Smart Objects**  
July 12-15, 2006; Minneapolis, MN, USA;  
<http://ares.insa-lyon.fr/~gchelius/index.php?n=Conference.SANSO2006>

**ICPADS'2006: 12th International Conference on Parallel and Distributed Systems**  
July 12-15, 2006; Minneapolis, MN, USA;  
<http://www.icpads.umn.edu/>

**MobiQuitous'2006: 3rd Annual International Conference on Mobile and Ubiquitous Systems: Networking and Services**  
July 17-21, 2006; San Jose, California, USA;  
<http://www.mobiquitous.org>

**PODC'2006: 25th Annual ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing**  
July 23-26, 2006; Denver, Colorado, USA;  
<http://www.podc.org/podc2006/>

**NCA'2006: 5th IEEE International Symposium on Network Computing and Applications**  
July 24-26, 2006; Cambridge, MA, USA;  
<http://www.ieee-nca.org/>

**15th USENIX Security Symposium**  
July 31-August 1, 2006; Vancouver, B.C., Canada;  
<http://www.usenix.org/events/sec06/>

## Meetings for August 2006

**EC'2006: 3rd International Workshop on Embedded Computing**  
August 14, 2006; Columbus, Ohio, USA;  
<http://www.ehpclab.org/icpp06-ec/>

**RTCSA'2006: 12th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications**  
August 16-18, 2006; Sidney, Australia;  
<http://www.rtcsa.org/>

**HOT Chips 18: HOT Chips Symposium on High-Performance Chips**  
August 20-22, 2006; Stanford University, Palo Alto, CA, USA;  
<http://www.hotchips.org/hc18/>

**SECURECOMM'2006: 2nd IEEE/CreateNet International Conference on Security and Privacy for Emerging Areas in Communication Networks**  
August 28 - September 1, 2006; Baltimore, MD, USA  
<http://www.securecomm.org>

### **Europar'2006**

August 29 - September 1, 2006; Dresden, Germany;  
<http://www.europar2006.de/>

## **Meetings for September 2006**

**P2P'2006: 6th IEEE International Conference on Peer-to-Peer Computing "Distributed computing at the edge of the Internet"**

September 6-8, 2006; Cambridge, UK;  
<http://p2p2006.csc.ncsu.edu/>

### **SIGCOMM'2006**

September 11-15, 2006; Pisa, Italy;  
<http://www.acm.org/sigs/sigcomm/sigcomm2006/>

**HPCC'2006: 2nd International Conference on High Performance Computing and Communications**

September 13-15, 2006; Munich, Germany;  
<http://hpcc06.lrr.in.tum.de/>

**MobiCom'2006: 12th International Conference on Mobile Computing and Networking**

September 23-29, 2006; Los Angeles, CA, USA;  
<http://www.sigmobile.org/mobicom/2006/>

**QEST'2006: 3rd International Conference on Quantitative Evaluation of Systems**

September, 11-14, 2006; Riverside, CA, USA;  
<http://www.qest.org/qest2006/>

**DISC'2006: 20th International Symposium on Distributed Computing**

September 18-20, 2006; Stockholm, Sweden;  
<http://www.sics.se/disc2006/>

**SECON'2006: 3rd Annual IEEE Communications Society Conference on Sensor and Ad Hoc Communications and Networks**

September 25-28, 2006; Reston, VA, USA;  
<http://www.comsoc.org/confs/SECON/2006/>

**CLUSTER'2006: 3rd Annual IEEE Communications Society Conference on Sensor and Ad Hoc Communications and Networks**

September 25-28, 2006; Barcelona, Spain;  
<http://www.cluster2006.org/>

## **Meetings for October 2006**

**SRDS'2006: 25th IEEE Symposium on Reliable Distributed Systems**

October 2-4, 2006; Leeds, UK;  
<http://www.comp.leeds.ac.uk/SRDS2006/>

**CFSE'2006: 5th French Sigops Conference on Operating Systems**

October 4-6, 2006; Perpignan, France;  
<http://www.renpar.org/>

**ICCCN'2006: 15th International Conference on Computer Communications and Networks**

October 9-11, 2006; Arlington, Virginia, USA;  
<http://sa1.sice.umkc.edu/icccn06/>

**JTRES'2006: 4th Workshop on Java Technologies for Real-time and Embedded Systems**

October 11-13, 2006; Paris, France;  
<http://www-users.cs.york.ac.uk/~andy/JTRES06/>

**EDCC'2006: 6th European Dependable Computing Conference**

October 18-20, 2006; Coimbra, Portugal;  
<http://edcc.dependability.org>

**CODES+ISSS'2006: 3rd IEEE/ACM/IFIP International Conference on Hardware/Software Codesign and System Synthesis**

October 22-25, 2006; Seoul, Korea;  
<http://www.codes-iss.org>

**EMSOFT'2006: 6th Annual ACM Conference on Embedded Software**

October 22-25, 2006; Seoul, Korea;

<http://www.it.uu.se/conf/EMSOFT06/>

**ASPLOS'2006: 12th International Conference on Architectural Support for Programming Languages and Operating Systems**  
October 21-25 2004; San Jose, CA USA;  
<http://www.princeton.edu/~asplos06/>

**ESTIMEDIA'2006: 4th IEEE Workshop on Embedded Systems for Real-Time Multimedia**  
October 26-27, 2006; Seoul, Korea;  
<http://peace.snu.ac.kr/ESTIMedia/>

**OOPSLA'2006: ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications**  
October 22-26, 2006; Portland, OR, USA;  
<http://www.oopsla.org/2006>

**DOA'2006: International Symposium on Distributed Objects and Applications**  
October 29 - November 3, 2006; Montpellier, France;  
<http://www.cs.rmit.edu.au/fedconf>

# ACM SIGOPS Mark Weiser Award

## Call for Nominations

Nominations are solicited for the 2006 Mark Weiser Award. This prestigious award, created in 2001 by ACM SIGOPS, is given annually to an individual who has demonstrated creativity and innovation in operating systems research. The award is named in honor of Mark Weiser, a computing visionary recognized for his research accomplishments during his career at Xerox PARC.

The selection committee will choose the recipient based on:

*Contributions that are highly creative, innovative, and possibly high-risk, in keeping with the visionary spirit of Mark Weiser.*

The recipient must have begun his or her career no earlier than 20 years prior to nomination.

ACM SIGOPS presents a \$1000 prize to the recipient in memory of Mark and his many contributions to SIGOPS and the operating systems community. The 2006 award will be announced and presented at the OSDI conference in November in Seattle.

Nominations and supporting letters should be sent to Doug Terry, the committee chair, via e-mail ([terry@microsoft.com](mailto:terry@microsoft.com)) by **September 1, 2006**.

Please see [http://www.acm.org/sigops/weiser\\_award.html](http://www.acm.org/sigops/weiser_award.html) for detailed nomination procedures, a list of previous award winners, and the award committee members. Contact Doug Terry for additional information.

## **Program Director's Column**

**Brett D. Fleisch**

Program Director, CISE CNS  
National Science Foundation

It is with great enthusiasm that I write a quarterly column for the systems community in OSR. As many of you know, I assumed the position of Program Director, Computer and Network Systems Division (CNS) in the CISE Directorate in April 2004 as an NSF "rotator"; I currently also serve on the faculty of the University of California, Riverside.

I have been delighted with the challenges and opportunities of being selected your representative to work with the tremendously dedicated staff of the National Science Foundation. The position has afforded me the opportunity to affect the direction, quality and amount of research performed by our community. The position of Program Director has allowed me to represent the community for you in often making very difficult decisions. I often say "one day of work in Washington is worth 100 days at my home institution in terms of research impact and aging". While I continue my individual research program with my students, the impact of the science and career opportunities I have been able to guide during my short time at NSF has tremendously invigorated me personally and our community. By funding science that has the potential for high impact and high reward we move our community forward and create a workforce that is able to sustain our future success.

### **Accomplishments.**

During the past two years I have had some wonderful accomplishments to report that may affect you. I have been able to continue support for SOSP student travel, I have started support for a small number of student stipends for OSDI, and held the NSF MIT Workshop on Grand Challenges in Distributed Systems that produced the report "Report on Grand Challenges in Distributed Systems, November 2005. Additionally, Division Director Michael Foster and I are shepherding a National Academy Science (NAS) proposal that initiates a NAS study of Moore's Law Economy. Moreover, our community has been steadily involved and participating in the GENI project ([www.geni.net](http://www.geni.net)). There have been several Town Halls and various meetings where I have represented our community. We have also initiated a community file system trace repository at Harvey Mudd College.

Every year NSF works hard to narrow down a large number of CAREER proposals using the criteria of Intellectual Merit and Broader Impacts; we recommend to the Division Directors the promising young scientists that are awarded CAREER awards. The stellar young scientists selected by my panelists appear in Table 1.

2006 FY Funds, Division Director Dr. Wei Zhao	
Dr. Edward Kohler	UCLA
Dr. Emin Gün Sirer	Cornell University
Dr. Dongyan Xu	Purdue University
2005 FY Funds, Division Director Dr. Greg Andrews	
Dr. I. Gupta	University of Illinois at Urbana-Champaign
Dr. Yongdae Kim,	University of Minnesota Twin Cities
Dr. Mema Roussopoulos	Harvard University
Dr. Thu Nguyen	Rutgers University
Dr. Surrender Chandra	University of Notre Dame

Table 1: Career Competition CISE/CNS/Fleisch

I am tremendously grateful to the dedicated scientists who I have been working with (former or currently) at NSF including Dr(s). D. Helen Hill., Guru Parulkar, Karl Levitt, Carl Landwehr, Greg Andrews, Wei Zhao, Darleen Fisher, Caroline Wardle, Joe Evans, Rita Rodriguez, Harriet Taylor, David Goodman, David Du, Almadena Chtchelkanova, Jan Cuny and Frederica Darema. Naturally, the dedicated administrative staff has tremendously supported the scientific mission and the day-to-day operations of our activities. The Program Directors are tremendously dedicated individuals that have the responsibility of scientific evaluation of thousands of proposals submitted the CISE directorate CNS Division and to cross-cutting programs that involve CISE interests. I want to thank all these people including the CISE Division Directors and Dr. Peter Freeman Assistant Director at NSF for their service and carefully thought out advice.

Finally, I want to thank the outstanding panelists that I have called upon to serve as reviewers. Our community's should be directly involved in evaluating the scientific merit and broader impacts of proposals submitted to NSF. The process of shepherding the best proposals through the scientific process is guided by the brilliant advice of these panelists. Panelists that have worked for me have for the most part been some of the most conscientious, talented, and diverse reviewers selected to assist NSF programs. I want to thank them for their hard work in this important activity.

If you have any questions about the programs or solicitations in the CNS Division, please contact any of the current program Directors at NSF or me personally and we would be delighted to answer your questions.