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DEDICATED TO THE MEMORY OF
JOCHEN LIEDTKE
(1953-2001)

Jochen Liedtke, a program committee member of this SOSP, died tragically at Frankfurt Airport on Sunday, June 10, 2001 on his return from the SOSP program committee meeting. He had been in ill health earlier in the year, and had undergone two major surgeries. It would have been easy (and entirely understandable) for him to have declined to travel to the meeting. Yet, he was committed to participating fully in the process and travelled across the Atlantic to attend. His dedication and sense of duty are truly humbling.

At the time of his death, Jochen was a professor at the University of Karlsruhe in Germany. Earlier, he had been a researcher at the IBM T.J. Watson Research Center at Yorktown Heights and at the GMD in Bonn. He is widely known in the operating systems community for his contributions to microkernel design and implementation, particularly the L3 and L4 microkernels. He was an active participant in the research community, serving on the program committees of many conferences and workshops. He served as the General Chair of HotOS-VIII, held in Schloss Elmau, Germany in May, 2001.

Jochen is survived by his wife, Adelheid, and many friends and colleagues. The SOSP community is deeply saddened by his passing, and dedicates these proceedings to his memory.

Eighteenth ACM Symposium on Operating System Principles

MESSAGE FROM THE GENERAL CHAIR

SOSP has moved back into the mountains, this time to the Chateau Lake Louise in Alberta.

The job of a General Chair is, basically, to worry. The people behind this SOSP were outstanding and gave me little occasion to exercise the traditional role of a General Chair. Satya's vision and hard work with his committee has resulted in an excellent program that is both broad and deep. Tom Bressoud as treasurer made sure that the financial procedures – from contract negotiation to registration cash flow – worked smoothly, and was always ready with the right spreadsheet when I felt my worry level rising. Norm Hutchinson is the main reason that the conference is in this beautiful historic hotel and in this stunning location, and he has managed the logistics wonderfully. Lorenzo Alvisi ran publicity smoothly despite the deep nondeterministic mysteries of posting to netnews and the interesting cyber-counterattacks of those who felt e-mail containing a call for papers were the vilest form of spam. Geoff Voelker built and maintained the web registration service while simultaneously serving as SIGCOMM local arrangements chair, which should earn him a high place in ACM Heaven, and he kept us all sane in tense moments with his good humor. Marvin Theimer organized a strong committee which ably distributed the student scholarships, Mike Feeley organized the student help and scribes, and Chris Small once again arranged the conference CD-ROM production. We also enjoyed the support from many at ACM Headquarters, and it was a joy to work with the people at the Chateau Lake Louise, most notably Amanda Burrowes and Joanne Trudeau. Finally, I would like to thank Ava Hristova for her design of the conference web page structure, David Kotz for his institutional memory and sound advice, and Stefan Savage and Fred Schneider for their advice and humor.

I am very thankful to the companies that contributed to SOSP: Akamai, Hewlett-Packard Labs, Inktomi, Intel Corporation, Mercury Computer Systems, Microsoft Research, and QUALCOMM.

Thank you all!

Keith Marzullo
University of California, San Diego

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MESSAGE FROM THE PROGRAM CHAIR

At the dawn of the new millennium, it is useful to pause and reflect on the role of SOSP. It is hard to believe that SOSP is over 35 years old! The first one was held in 1965, long before many of the attendees of this conference were born. In those 35 years, computing has been transformed in ways that were unimaginable back in 1965. Somehow, SOSP has retained its reputation as the premier forum for research results in experimental computer systems. How has it succeeded in this role for so long?

I believe that there are two reasons. First and foremost is the dedication and hard work of the many individuals who have served on the SOSP program committees. These are talented individuals with heavy demands on their time. Their willingness to devote a substantial part of that time to the SOSP review process shows their commitment to preserving the quality of SOSP. The second reason is SOSP's broad charter. In spite of the emergence of more specialized conferences in areas such as networking, mobile computing, reliability and security, SOSP continues to welcome work of the highest quality in those areas. This broad view of experimental computer systems has served SOSP well, and will continue to be one of its strengths as we discover further new dimensions to computing.

This year we received 85 submissions: lower than in the past two SOSPs, but well within the observed long-term range. We accepted 17 of the 85, and nominated two as award papers to ACM TOCS ("Untrusted Hosts and Confidentiality: Secure Program Partitioning" and "BASE: Using Abstraction to Improve Fault Tolerance"). All acceptances were conditional, pending successful shepherding by a program committee member. This long-standing SOSP tradition has been an important factor in ensuring high quality. The reviewing process we used was a variant of one that has worked well in the past. Four program committee members reviewed each paper; each of those members also obtained one review from an external reviewer. Thus, most papers received eight reviews. In addition, each program committee member was required to skim about half the papers he or she did not review. This combination of deep understanding as well as broad familiarity with the submissions led to thoughtful and well-informed discussions at the program committee meeting. Some of the negative decisions were painful and heartbreaking: we felt that many of the rejected papers showed a lot of promise, and that improved versions would be strong future submissions to SOSP or other conferences. Besides the reviewed papers, the conference has three invited speakers, a poster session, and a work-in-progress session.

One of the pleasant tasks of the program chair is to acknowledge the many individuals who have helped in putting the program together. First, I would like to thank the program committee. I could not have asked for a better group of people to work with. They did a huge amount of reviewing, were prompt with their reviews, participated vigorously in the discussions at the meeting, were fair and balanced in their judgments, and kept an open mind at all times. Whenever I needed advice on how to handle a tricky situation, they came through with thoughtful suggestions and carefully considered opinions. Overall, they were superb custodians of SOSP quality.

I would also like to thank the Publications Chair, Greg Ganger, and his assistant, Joan Digney, for taking care of all aspects of producing this document. Their help has saved me a considerable amount of time and attention to detail. Chris Small handled the production of a CD-ROM companion to the proceedings, and I would also like to thank him. Keith Marzullo has been wonderful to work with as General Chair: prompt in his responses, thorough and detailed in his follow up, and always in good spirits. To my administrative assistant, Tracy Farbacher, and my graduate student, Rajesh Balan, both of whom helped me in countless ways with the logistics of the reviewing process and the program committee meeting: a big thank you! The dedication and help of all these people, and many others not mentioned here, has made it a pleasure to serve as program chair of this SOSP. It has also been an honor and privilege.

M. Satyanarayanan
Program Chair, SOSP-18
August 2001

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