

USENIX Association

**Proceedings of the
13th USENIX Symposium on Operating
Systems Design and Implementation**

**October 8–10, 2018
Carlsbad, CA, USA**

Symposium Organizers

Program Co-Chair

Andrea Arpaci-Dusseau, *University of Wisconsin—Madison*
Geoff Voelker, *University of California, San Diego*

Program Committee

Rachit Agarwal, *Cornell University*
Marcos K. Aguilera, *VMware Research*
Mahesh Balakrishnan, *Yale University/Facebook*
Ranjita Bhagwan, *Microsoft Research India*
Edouard Bugnion, *École Polytechnique Fédérale de Lausanne (EPFL)*
Miguel Castro, *Microsoft Research Cambridge*
Kang Chen, *Tsinghua University*
Vijay Chidambaram, *The University of Texas at Austin*
Landon Cox, *Duke University*
Angela Demke Brown, *University of Toronto*
Sandhya Dwarkadas, *University of Rochester*
Sasha Fedorova, *University of British Columbia*
Roxana Geambasu, *Columbia University*
Cristiano Giuffrida, *Vrije Universiteit Amsterdam*
Haryadi Gunawi, *University of Chicago*
Andreas Haeberlen, *University of Pennsylvania*
Jon Howell, *VMware Research*
Rebecca Isaacs, *Twitter*
Michael Isard, *Google*
Frans Kaashoek, *Massachusetts Institute of Technology*
Manos Kapritsos, *University of Michigan*
Taesoo Kim, *Georgia Institute of Technology*
Sam King, *University of California, Davis*
Christoforos Kozyrakis, *Stanford University*
Jinyang Li, *New York University*
Wyatt Lloyd, *Princeton University*
Jay Lorch, *Microsoft Research*
Richard Mortier, *University of Cambridge*
Gilles Muller, *Inria*
KyoungSoo Park, *Korea Advanced Institute of Science and Technology (KAIST)*

Raluca Popa, *University of California, Berkeley*
Don Porter, *The University of North Carolina at Chapel Hill*
Justine Sherry, *Carnegie Mellon University*
Liuba Shrira, *Brandeis University*
Ryan Stutsman, *University of Utah*
Steve Swanson, *University of California, San Diego*
Michael Swift, *University of Wisconsin—Madison*
Dan Tsafir, *VMware Research and Technion—Israel Institute of Technology*
Rashmi Vinayak, *Carnegie Mellon University*
Xi Wang, *University of Washington*
Andrew Warfield, *Amazon*
Roger Wattenhofer, *ETH Zurich*
Hakim Weatherspoon, *Cornell University*
Ming Wu, *Microsoft Research*
Yubin Xia, *Shanghai Jiao Tong University*
Ding Yuan, *University of Toronto*
Matei Zaharia, *Stanford University*
Irene Zhang, *Microsoft Research*
Yiying Zhang, *Purdue University*

Poster Session Co-Chairs

Vijay Chidambaram, *The University of Texas at Austin*
Yiying Zhang, *Purdue University*

Steering Committee

Brad Chen, *Google*
Jason Flinn, *University of Michigan*
Casey Henderson, *USENIX Association*
Kimberly Keeton, *Hewlett Packard Labs*
Hank Levy, *University of Washington*
James Mickens, *Harvard University*
Brian Noble, *University of Michigan*
Timothy Roscoe, *ETH Zurich*
Margo Seltzer, *University of British Columbia*
Amin Vahdat, *Google and University of California, San Diego*

External Reviewers

Remzi Arpaci-Dusseau
Anish Athalye
Jonathan Behrens
Gino Brunner
Tej Chajed
Nishanth Chandran
Haibo Chen
Charlie Curtsinger
Cody Cutler
Manuel Eichelberger
Jon Gjengset
Michael Gleicher
Joseph Gonzalez
Matthew Hicks
Chris Hodsdon
Atalay Mert İleri

Pankaj Khanchandani
David Lion
Haonan Lu
Yu Luo
Tony Mason
Darya Melnyk
Ellis Michael
Robert Morris
Mihir Nanavati
Luke Nelson
Khiem Ngo
Amy Ousterhout
Pál András Papp
Ali Razeen
Xiang Ren
Oliver Richter

Kirk Rodrigues
Edo Roth
Brian Sandler
Malte Schwarzkopf
Igor Smolyar
Zhenyu Song
Theano Stavrinos
Julian Steger
Simon Tanner
Yuyi Wang
Michael Wei
Tian Yang
Idan Yaniv
Yongle Zhang
Xu Zhao
Aviad Zuck