

Carlos Maltzahn, Adjunct Professor of Computer Science
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Education and Training

Univ. Diplom	University of Passau, Passau, Germany (Informatik)	1991
M.S.	University of Colorado, Boulder (Computer Science)	1997
Ph.D.	University of Colorado, Boulder (Computer Science)	1999

Research and Professional Experience

2003–present	Computer Science Department, University of California, Santa Cruz
2014–present	Adjunct Professor
2015–present	Director , Center for Research in Open Source Software (CROSS)
2013–present	Director and PI , UCSC/LANL Institute for Scalable Scientific Data Management, University of California, Santa Cruz, and Los Alamos National Lab, Los Alamos
2010–2014	Associate Adjunct Professor
2011–2012	Visiting Scientist , Ultrascale Systems Research Center, New Mexico Consortium, Los Alamos, NM
2010–present	Director , UCSC Systems Research Laboratory (SRL) (with Scott A. Brandt)
2009–2013	Associate Director , UCSC/LANL Institute for Scalable Scientific Data Management, University of California, Santa Cruz, and Los Alamos National Lab, Los Alamos
2008–2010	Assistant Adjunct Professor
2004–2008	Assistant Research Computer Scientist
2003–2004	Research Fellow
1999–2004	Member of Technical Staff , Performance Engineering, Network Appliance Inc, Sunnyvale
1994–1999	Guest Researcher , Digital Equipment Corporation / Compaq, Western Research Lab
1987–1991	Research Assistant , Computer Science Department, University of Passau, Passau, Germany

Publications.

Michael Sevilla, Noah Watkins, Carlos Maltzahn, Ike Nassi, Scott Brandt, Sage Weil, Greg Farnum, Sam Fineberg, “Mantle: A Programmable Metadata Load Balancer for the Ceph File System,” *28th ACM and IEEE International Conference for High Performance Computing Networking, Storage, and Analysis (SC15)*, Austin, CO, November 2015.

Jun He, John Bent, Aaron Torres, Gary Grider, Garth Gibson, Carlos Maltzahn, Xian-He Sun, “I/O Acceleration with Pattern Detection,” *22nd International ACM Symposium on High Performance Parallel and Distributed Computing (HPDC’13)*, New York City, NY, June 17-22, 2013.

Ning Liu, Jason Cope, Phil Carns, Christopher Carothers, Rob Ross, Gary Grider, Adam Crume, and Carlos Maltzahn, “On the role of burst buffers in leadership-class storage systems,” *MSST/SNAPI 2012*, Pacific Grove, CA, April 16 - 20 2012.

Ning Liu, Christopher Carothers, Jason Cope, Philip Carns, Robert Ross, Adam Crume, and Carlos Maltzahn, “Modeling a Leadership-scale Storage System”, 9th International Conference on Parallel Processing and Applied Mathematics (PPAM 2011), Torun, Poland, September 11-14, 2011

Roberto Pineiro, Kleoni Ioannidou, Carlos Maltzahn, Scott A. Brandt, “RAD-FLOWS: Buffering for Predictable Communication”, 17th IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 2011), Chicago, IL, April 11-14, 2011.

Synergistic Activities.

1. Director, UCSC/LANL Institute for Scalable Scientific Data Management (ISSDM); Director, Director, UCSC Systems Research Lab (SRL)
2. Visiting Scientist, Ultrascale Systems Research Center, New Mexico Consortium, Los Alamos, NM.
3. Steering, Program, and Organization: 1st Programmable File Systems Workshop (PFSW’14) in conjunction with HPDC’14. With Patrick McCormick (LANL). Vancouver, BC, Canada, June 2014.
4. Organization: Workshop on overcoming barriers to distributed production, storage, and analysis of multi-model ensemble forecasts in support of weather prediction research and education in universities (Big Weather 2014). With Josh Hacker (NCAR), Russ Schumacher (CSU), and Gretchen Mullendore (UND), Boulder, CO, January 2014.
5. Springer Journal of Real-Time Systems Award for Best Student Paper, RTAS 2008

Collaborators and Co-editors:

Dimitris Achlioptas (UCSC), Sasha Ames (LLNL), John Bent (EMC), Varun Bhagwan (Yahoo!), Scott A. Brandt (UCSC), Christopher M. Brislawn (LANL), Joe Buck (UCSC), Philip Carns (ANL), Christopher Carothers (RPI), Jason Cope (DDN), Adam Crume (UCSC), Matthew Curry (SNL), Jai Dayal (Georgia Tech), Nathan DeBardeleben (LANL), Garth Gibson (CMU), Maya B. Gokhale (LLNL), Tyron Grandison (Proficiency Labs), Hugh Greenberg (LANL), Gary Grider (LANL), Jun He (Univ. of Wisconsin-Madison), David Helmbold (UCSC), Nathan Hjelm (LANL), Kleoni Ioannidou (TidalScale), Latchesar Ionkov (LANL), Arnav Jhala (UCSC), Ivo Jimenez (UCSC), Shinpei Kato (Nagoya University), Amandeep Khurana (Cloudera), Thomas Kroeger (SNL), Mike Lang (LANL), Jeff LeFevre (UCSC), Ning Liu (ANL), Jay Lofstead (SNL), Adam Manzanares (Chico State), Michael Mateas (UCSC), Patrick McCormick (LANL), Michael McThrow (UCSC), Esteban Molina-Estolano (Quantcast), Ike Nassi (TidalScale), Alex J. Nelson (UCSC), Katia Obraczka (UCSC), Alex Pang (UCSC), Roberto Pineiro (UCSC), Ian Pye (CloudFlare), Robert Ross (ANL), Bruno Sanso (UCSC), Michael Sevilla (UCSC), Andrew Shewmaker (UCSC), Dimitrios Skourtis (UCSC), Brad Smith (UCSC), Xian-He Sun (IIT), Wang-Chiew Tan (UCSC), Aaron Torres (LANL), Lee Ward (SNL), Noah Watkins (UCSC), Sage Weil (Inktank), Jim Whitehead (UCSC), David Wolpert (NASA), Jon Woodring (LANL)

Graduate and Postdoctoral Advisors and Advisees:

Ph.D. advisors: Dirk Grunwald (University of Colorado at Boulder), Kathy Richardson (Anita Borg Institute for Women and Technology)

M.S. advisor: Dirk Grunwald (University of Colorado at Boulder)

Ph.D. advisees: Sasha Ames (LLNL), Varun Bhagwan (Yahoo!), Joe Buck, Adam Crume, Latchesar Ionkov (LANL), Ivo Jimenez, Michael Sevilla, Andrew Shewmaker, Dimitrios Skourtis, Noah Watkins.

M.S. advisees: Ben Lau, Esteban Molina-Estolano, Ranjan S. Venaktesh