Emery D. Berger

Education

PhD, University of Texas at Austin, 2002 (Computer Science).

MS, University of Texas at Austin, 1991 (Computer Science).

BS, *cum laude*, University of Miami, 1988 (Computer Science).

Experience

Associate Professor (2008–present), Dept. of Computer Science, University of Massachusetts Amherst.

Associate Researcher (2008–present), Barcelona Supercomputing Center, Barcelona, Spain.

Assistant Professor (2002–2008), Dept. of Computer Science, University of Massachusetts Amherst.

Visiting Researcher (2004, 2005, 2006), Microsoft Research, Redmond, Washington.

Research Assistant (1997–2002), Dept. of Computer Science, University of Texas at Austin.

Research Intern (2000–2001), Microsoft Research, Redmond, Washington.

Honors

Most Influential OOPSLA Paper (test of time award), 2012.

Google Research Award, 2011.

ACM Senior Member, 2011.

NSF CAREER Award, 2004.

Best Paper Award, USENIX Conference on File and Storage Technologies (FAST), 2007.

Lilly Teaching Fellowship, University of Massachusetts Amherst, 2006.

Microsoft Research Fellowship, 2001.

Five most closely related publications

Daniel Barowy, Charlie Curtsinger, Emery Berger, Andrew McGregor. AutoMan: a platform for integrating human-based and digital computation. In *Proceedings of the 27th Annual ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA 2012)*, October 2012.

Jacob Sorber, Alexander Kostadinov, Matthew Brennan, Matthew Garber, Mark Corner, and Emery Berger. Eon: A Language and Runtime System for Perpetual Systems. In *Proceedings of the 5th ACM Conference on Embedded Networked Sensor Systems (SenSys 2007)*, November 2007.

James Cipar, Mark Corner, Emery Berger. TFS: A Transparent File System for Contributory Storage. In *Proceedings of the Fifth USENIX Conference on File and Storage Technologies (FAST 2007)*, February 2007.

Brendan Burns, Kevin Grimaldi, Alexander Kostadinov, Emery Berger, Mark Corner. Flux: A Language for Programming High-Performance Servers. In *Proceedings of the 2006 USENIX Annual Technical Conference (USENIX 2006)*, May 2006.

Ting Yang, Tongping Liu, Emery Berger, Scott Kaplan, J. Eliot B. Moss. Redline: First Class Support for Interactivity in Commodity Operating Systems. In *Proceedings of the 8th USENIX Symposium on Operating Systems Design and Implementation (OSDI 2008)*, December 2008.

Five other significant publications

Ting Yang, Emery Berger, Scott Kaplan, Eliot Moss. CRAMM: Virtual Memory Support for Garbage-Collected Applications. In *Proceedings of the 7th USENIX Symposium on Operating Systems Design and Implementation (OSDI 2006)*, November 2006.

Gene Novark, Emery Berger, and Benjamin Zorn. Exterminator: Automatically Correcting Memory Errors with High Probability. In *Proceedings of the 2007 ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2007)*, June 2007.

Emery Berger and Benjamin Zorn. DieHard: Probabilistic Memory Safety for Unsafe Languages. In *Proceedings of the 2006 ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2006)*, June 2006.

Emery Berger, Kathryn S. McKinley, Robert Blumofe and Paul Wilson. Hoard: A Scalable Allocator for Multithreaded Applications. In *The Ninth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS-IX)*, November 2000.

Matthew Hertz, Yi Feng, and Emery Berger. Garbage Collection Without Paging. In *Proceedings of the 2005 ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2005)*, June 2005.

Selected professional activities

Associate Editor, ACM Transactions on Programming Languages and Systems (TOPLAS), 2007–present.

Program Co-Chair, 5th USENIX Workshop on Hot Topics in Parallelism (HotPar 2013), 2012-2013.

Program Chair, ACM SIGPLAN Workshop on Determinism and Correctness in Parallel Programming (WoDet 2012), 2012.

Program Co-Chair, ACM SIGPLAN Conference on Virtual Execution Environments (VEE), 2010.

Program Committee Member, ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI), 2004, 2008, 2013.

Program Committee Member, International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2011.

Program Committee Member, USENIX Conference on Operating System Design and Implementation (OSDI), 2010.

Program Committee Member, ACM Symposium on Principles and Practice of Parallel Programming (PPoPP), 2008.

Collaborators

Thesis advisor: Kathryn McKinley

Graduate Student Advisees (3 Doctoral, 5 Masters): Gene Novark (Phd 2010, Morgan Stanley), Ting Yang (PhD 2008, Intel Corporation), Matthew Hertz (PhD 2006, Canisius College), Jim Cipar (Masters 2007, CMU), Yi Feng (Masters 2006, Google), Vitaliy Lvin (Masters 2007, Google), Yong Yuan (Masters 2005), Pritesh Sharma (Masters 2005).

Other collaborators (2003–present) : Brendon Burns (Union College), Peter Desnoyers (VMWare), Scott Kaplan (Amherst College), Michael Hicks (University of Maryland), Daniel Jimenez (Texas A & M), Naren Sachindran (IBM Research India), Benjamin Zorn (Microsoft Research).