

Inria & LIP6 <https://lip6.fr/Marc.Shapiro/>  
 Sorbonne-Université, Boîte courrier 169 <mailto:Marc.Shapiro@acm.org>  
 4, place Jussieu (26-00/211) tel.: +33 1 4427 7093  
 75252 Paris Cedex 05, France  
 PhD 1980, ENSEEIHT-INP, Toulouse. Habilitation 2002, UPMC.

**KEYWORDS** Large Scale Distributed Systems, Conflict-Free Replicated Data Types, Data Replication and Consistency, Just-Right Consistency, Cloud Computing, Partition-Tolerant Replication, Disconnected and Co-Operative Work, Garbage Collection, Fine-Grain Concurrent Algorithms.

**PROFESSIONAL EXPERIENCE** **2005–Today** Principal Research Scholar, Delys group (LIP6 & Inria), Paris (France).  
**1999–2005** Senior Researcher, leading Dist. Sys. Group, Microsoft Research, Cambridge (UK).  
**1986–1999** Senior Research Scholar, then Principal Research Scholar, Inria, leading SOR group, Rocquencourt (France).  
**1993–1994** Visiting Scientist, Cornell University, Ithaca (NY, USA)  
**1985** Software engineer, Inria, Rocquencourt (France).  
**1984–1985** Software Engineer, GIPSI SM90 (Inria-Bull-CNET).  
**1982–1985** Junior Scientist, CMIRH, Paris (France).  
**1980–1981** Visiting Scientist, Mass. Institute of Technology, Cambridge (MA, USA).

**SERVICE AND RESPONSIBILITIES (SELECTION)** **Today** VP for research, *Société informatique de France (SIF)*  
**2016–2021** Principal Investigator, ANR project RainbowFS  
**2012–2018** Member European Research Council panel PE6 (Computer Science)  
**2018** Co-organiser, Dagstuhl W. “Data Consistency in Distributed Systems: Algorithms, Programs, and Databases”  
**2013–2016** Principal Investigator, European project SyncFree.  
**2014** Co-chair, OPODIS conference.  
**2010–2014** Principal investigator, ANR Blanc project ConcoRDanT  
**2013** Co-organizer, Dagstuhl seminar on “Consistency In Distributed Systems.”  
**2009–2015** Member ACM Europe Council.  
**2004–2008** Founder, chair of EuroSys.  
**1995–1999** Vice-chair of ACM SIGOPS.

**SELECTED PUBLICATIONS**

A. Gotsman, H. Yang, C. Ferreira, M. Najafzadeh, M. Shapiro. *’Cause I’m Strong Enough: Reasoning about consistency choices in distributed systems.* In *Symp. on Principles of Prog. Lang. (POPL)*, St. Petersburg, FL, USA, January 2016.

M. Zawirski, N. Preguiça, S. Duarte, A. Bieniusa, V. Balesgas, M. Shapiro. *Write fast, read in the past: Causal consistency for client-side applications.* In *Int. Conf. on Middleware*, Vancouver, BC, Canada, December 2015.

V. Balesgas, N. Preguiça, R. Rodrigues, S. Duarte, C. Ferreira, M. Najafzadeh, M. Shapiro. *Putting consistency back into eventual consistency.* In *Euro. Conf. on Comp. Sys. (EuroSys)*, Bordeaux, France, April 2015.

L. Gidra, G. Thomas, J. Sopena, M. Shapiro, N. Nguyen. *NumaGiC: a garbage collector for big data on big NUMA machines.* In *Int. Conf. on Archi. Support for Prog. Lang. and Systems (ASPLOS)*, Istanbul, Turkey, March 2015.

M. Saeida Ardekani, P. Sutra, M. Shapiro. *Non-Monotonic Snapshot Isolation: scalable and strong consistency for geo-replicated transactional systems.* *Symp. on Reliable Dist. Sys. (SRDS)*, Braga, Portugal, October 2013.

- M. Shapiro, N. Preguiça, C. Baquero, M. Zawirski. *Conflict-free replicated data types*. Stab., Safety, and Security of Dist. Sys. (SSS), Oct. 2011.
- V. Vafeiadis, M. Herlihy, T. Hoare, M. Shapiro. *Proving correctness of highly-concurrent linearisable objects*. Principles & Practice Parallel Prog. (PPoPP), March 2006.
- Y. Saito, M. Shapiro. *Optimistic Replication*. Computing Surveys, March 2005.
- A.-M. Kermarrec, A. Rowstron, M. Shapiro, P. Druschel. *The IceCube approach to the reconciliation of divergent replicas*. Symp. on Principles of Dist. Comp. (PODC), Aug. 2001.
- P. Ferreira, M. Shapiro. *Garbage collection and DSM consistency*. Symp. on Op. Sys. Design and Implementation (OSDI), November 1994.
- V. Abrossimov, M. Rozier, M. Shapiro. *Generic virtual memory management for operating system kernels*. Symp. on Op. Sys. Principles (SOSP), December 1989.

## PUBLICATIONS

Journals: Bulletin TC Data Engineering 2016, Bulletin EATCS 2011, Computing Surveys 2005, Computing Systems 1989, Distributed Systems Online 2006, IJAIT 2005, Operating System Review 2010, 2011, SIGACT News 2014, Techniques et Sciences Informatiques 1984, 1987, 1997.

Book chapters: LNCS 1752 2000, IEEE CS Press 1984, Encyclopædia of Database Systems 2009×2, 2014×2, 2017×3.

Invited talks: dotScale 2018, PaPoC+LADIS 2017, KTH 2016, U. Paris Descartes 2016, Concur 2016, ASD/ASF Winter School 2016, Critéo 2016, Inria-EPFL 2016, U. Joseph Fourier 2016, CodeMesh 2015, Royal Holloway U. 2015, U. Nova 2015, Chem. Conc. Pg. 2011, 2015, CurryOn 2015, Mascots 2014, Technion 2014×2, CSD&M 2014, Dagstuhl 2008, 2012, 2013, 2015, OPODIS 2013, U. Darmstadt 2013, CAV-EC<sup>2</sup> 2013, U. Chalmers 2012, EPFL 2012, EMDC 2012, Google 2011×2, Verico 2011, WetICE 2011, MPI-SWS 2010, ETHZ 2007, Monte Verità Replication-30 2007, ICFP 2006, BDA 2002.

International Conferences: ASPLOS 2013, 2015, C++ Conference 1987, 1990, CollaborateCom 2007, CoopIS 2003, 2007, DAIS 2006, DISC-WDAG 1995, 2004, 2012, ECOOP 1989, 1998, Euromicro 1980, Euro-Par 2008, 2013, EuroSys 2015, FTCS 1981, FTDCS 1995, Group 2016, I-WOOOS 1990, 1991, 1992, 1993, ICC 1988, ICDCS 1982, 1986, 1994, 1996, 2009, 2016, IWMM-ISMM 1992, 1995, LADIS 2009, 2014×3, 2015, Middleware 2014, 2015, MDM 2004, 2007, OOPSLA 1995, 2004, OPODIS 2004, 2014, OSDI 1994, PLDI 1998, PLOS 2011 (best paper), PaPoC-PaPEC 2015×2, 2016×3, PODC 1992, 2001, 2005, POPL 2016, POS 1989, 1992, 1994, 1998, 2000, 2000, PPoPP 2006, SAC 2011, SIGOPS EW 1986, 1988, 1992, 1995, 2004, 2000, SOSP 1989, SRDS 1991, 2011, 2013, 2015, SYSTOR 2015, SSS 2011.

Proceedings: I-WOOOS 1991, 1992, 1993, OPODIS 2014.

## SOFTWARE AND PATENTS

Five patents.

Software: AntidoteDB (2014–today), SwiftCloud (2012–2014), Treedoc (2008–2011), Telex (2007–2012), Joyce (2004–2005), Rufis (2003), IceCube (2000–2003), PerDis (1996–2000), Larchant (1993–1996), SSPC (1990–1994), maillons (1992), SOS (1985–1990), COOL-1 (1990–1991), Chorus virtual memory (1986–1988), STL dynamic arrays (1987), Emacs BibTeX mode (1987), sockets in Unix V7 (1984), Rebus (1976–1980).

## MORE INFORMATION

Detailed CV at <https://lip6.fr/Marc.Shapiro/perso/CV/resume.pdf>. Research statement at <https://pages.lip6.fr/Marc.Shapiro/perso/research-statement/research-statement.pdf>.