

Idit Keidar – Curriculum Vitae

July 31, 2018

Current Address

Technion - Israel Institute of Technology,
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Personal

Born: May 22, 1967.

Academic Degrees

Ph.D. Computer Science, Hebrew University of Jerusalem.	Oct 1998
M.Sc. Computer Science, Hebrew University, <i>Summa cum laude</i> .	Apr 1994
B.Sc. Computer Science and Mathematics, Hebrew University, <i>Summa cum laude</i> .	Aug 1992

Employment

Academic Appointments

The Lord Leonard Wolfson Academic Chair	May 2017 – current
Department of Electrical Engineering, Technion, Professor (with Tenure)	Dec 2012 – current
Department of Electrical Engineering, Technion, Associate Professor with Tenure	Apr 2007 – Nov 2012
Department of Electrical Engineering, Technion, Senior Lecturer	Mar 2002 – Mar 2007
MIT Lab for Computer Science, Postdoctoral Research Associate	Oct 1998 – Jul 2002
Computer Science Institute, Hebrew University, Teaching and Research Assistant	Oct 1992 – Oct 1998

Visiting Academic Appointments

Department of Computer Science, Cornell University, Visiting Professor	Jul-Aug 2009
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Professional Experience

Orbs, Advisory Board Member	Jan 2018 – current
Yahoo Labs (now part of Oath), Visiting Principal Research Scientist	Mar 2014 – current
Kaminario, Advisory Board Member	Jul 2012 – current
Kaminario, Consultant	Jul 2012 – Jul 2013
Microsoft Research Silicon Valley, Consulting Researcher	Jul – Aug 2006
BBN Technologies (a Verizon Company), Consultant	Mar 2002 – Aug 2002
IBM Almaden Research Center, Summer Visitor	Summer of 1996

Military and Social Service

Israel Defense Forces, Officer, Programmer, Project Leader
Social Service Year, Israeli Scouts

Sep 1986 – Aug 1990
Sep 1985 – Aug 1986

Teaching

Technion

Operating System Structure Computer Engineering undergraduate required course.
Awarded **Citations for Excellence in Teaching** in Winter 2007–2008 and Winter 2008–2009 terms.
Principles of Reliable Distributed Systems top undergraduate/graduate course I developed.
Distributed Functional Programming, top undergraduate/graduate course I developed.
Advanced Topics in Reliable Distributed Systems, graduate course I developed.
VLSI Architecture Seminar, with Israel Cidon, Ran Ginosar, and Avinoam Kolodny.
Operating System Structure for Intel *M.EE* program, External Studies School, Fall 2006-2007.

Hebrew University of Jerusalem

Programming Lab (twice as instructor, once as teaching assistant), required undergraduate course.
Advanced Seminar in Computer Networks and Protocols (instructor), graduate level.
Computer Communication and Applications (teaching assistant).
Theory of Computation (teaching assistant).
Calculus, and *Algebra* (teaching assistant in Department of Mathematics).

Graduate Students and Postdocs Supervised

Postdocs – Past

1. *Rui Fan*, Oct 2009 – Oct 2010. Assistant Professor at *NTU*.
2. *Mark Silberstein*, Mar 2010 - Oct 2011. Assistant Professor at *Technion*.
3. *Stacy Patterson*, Oct 2011 - Sep 2013. Assistant Professor at Rensselaer Polytechnic Institute (*RPI*).

Ph.D. Students – Graduated

4. *Roger Khazan*, MIT, Jun 2002, co-supervised with Nancy Lynch. First position: Senior Research Staff Member at *MIT Lincoln Laboratory*.
5. *Roie Melamed*, (direct Ph.D.), Technion, Jul 2006. First position: Research Staff Member at *IBM Research Haifa Labs*.
6. *Gal Badishi*, (direct Ph.D.), Technion, Oct 2007. Chief Scientist at *Cyvera*. First position at *Rupin College*.
7. *Edward Bortnikov*, Technion, Aug 2008, co-supervised with Israel Cidon. Director of Research at *Yahoo! Research, Oath*.
8. *Maxim Gurevich*, Technion, Jan 2010, co-supervised with Ziv Bar-Yossef. First position at *Yahoo! Labs*; continued as Researcher at *Google* and *Yahoo*.
9. *Alexander Shraer*, Technion, Sep 2010. First position at *Yahoo! Labs*; continued at *Google* and *Apple*.
10. *Zvika Guz*, (direct Ph.D.), Technion, Oct 2010, co-supervised with Uri Weiser and Avinoam Kolodny. First position: Research Scientist at *Nvidia Research*. Continued to *Samsung Research*.
11. *Dmitri Perelman*, (direct Ph.D.), Technion, Aug 2012. First position at *Facebook*.

12. *Ittay Eyal*, (direct Ph.D.), Technion May 2013, co-supervised with Raphael Rom. First position: Postdoc at *Cornell University*; Assistant Professor at Technion EE department.
13. *Kfir Lev-Ari*, (direct Ph.D.), Technion Aug 2017. At *Apple*.
14. *Naama Kraus*, Technion Oct 2017, co-supervised with David Carmel. At *Microsoft*.
15. *Alexander (Sasha) Spiegelman*, Technion July 2018. At VMWare Research Group.

Ph.D. Students – Current

16. *Noam Shalev*, since Feb 2013; direct Ph.D. since Feb 2014.

Masters Students – Graduated

17. *Kyle Ingols*, M.Eng., MIT, May 2000. At *MIT Lincoln Laboratory*.
18. *Igor Tarashchanskiy*, M.Eng., MIT, Aug 2000.
19. *Omar Bakr*, M.Eng., MIT, Feb 2003. Received a Ph.D. from the *University of California, Berkeley*, co-founder at Tarana Wireless, Inc.
20. *Amir Sasson*, M.Sc., Technion, May 2004. Senior Software Engineer at *IBM Research Haifa Labs*.
21. *Nadav Lavi*, M.Sc., Technion, May 2005, with Israel Cidon.
22. *Alexander Shraer*, M.Sc., Technion, May 2006. Received a Ph.D. at the Technion; was Research Scientist at *Yahoo! Research* and *Google*; at *Apple*.
23. *Uri Schonfeld*, M.Sc., Technion, Jun 2006, with Ziv Bar-Yossef. Received a Ph.D. at *UCLA*.
24. *Ehud Shavit*, M.Sc., Technion, Jul 2007, with Israel Cidon.
25. *Roman Gindin*, M.Sc., Technion, Jul 2007, with Israel Cidon.
26. *Oleg Romanov*, M.Sc., Technion, Aug 2008.
27. *Alex Friedman*, M.Sc., Technion, Mar 2009.
28. *Amit Berman*, M.Sc., Technion, Feb 2010. Received a Ph.D. at the Technion.
29. *Dmitry Basin*, M.Sc., Technion, Nov 2011. At *Yahoo Research*.
30. *Liat Atsmon*, M.Sc., Technion, Jul 2012.
31. *Elad Gidron*, M.Sc., Technion, Aug 2012. At *Google*.
32. *Oved Itzhak*, M.Sc., Technion, Aug 2013, with Uri Weiser and Avinoam Kolodny.
33. *Meni Orenbach*, M.Sc., Technion, Apr 2015. Continued for Ph.D. at the Technion.
34. *Dani Shaket*, M.Sc., Technion, Apr 2018. At *Amazon*.

Masters Students – Current

35. *Hagar Porat*.
36. *Alon Berger*.

Selected Professional Activity

Journals

Associate Editor IEEE Computer Architecture Letters (CAL), 2012–2016.

Guest Editor Springer Distributed Computing, Volume 24, Numbers 3-4, Nov 2011, special issue with selected papers from DISC 2009.

Columnist (Column Editor) ACM SIGACT News Distributed Computing Column, Aug 2007 - Sep 2013.

Referee

Journal of the ACM (JACM); The SIAM Journal on Computing (SICOMP); ACM Transactions on Computer Systems (TOCS); Theoretical Computer Science (TCS); Journal of Algorithms; Springer Distributed Computing; IEEE Transactions on Parallel and Distributed Systems (TPDS); IEEE Transactions on Computers; IEEE Journal on Selected Areas in Communications (JSAC); Journal of Computer and Systems Science (JCSS); Journal of Parallel and Distributed Computing (JPDC); Springer World Wide Web Journal; Information Processing Letters (IPL); Parallel Processing Letters (PPL).

Conferences**Program Committee Chair or Co-Chair**

Chair, DISC, Sep 2009; Proceedings Editor, LNCS Volume 5805.
 Co-Chair, 5th Annual Henry Taub International TCE Conference, 2015; co-chair: Eran Yahav.
 Co-Chair, Int'l Systems and Storage Conf. (SYSTOR), 2015; co-chair: Gernot Heiser.
 Co-Chair, TRANSACT/WTTM 2017; co-chair: Aleksandar Dragojevic.
 Chair, 37th ACM Symp. on Prin. of Distributed Computing (PODC), Jul 2018.
 Chair, 24th ACM SIGPLAN Symp. on Prin. and Practice of Parallel Programming (PPoPP), 2019.

Organizing Committee Co-Chair Int'l Symp. on DIStributed Computing (DISC) 2013.

Steering Committee Member

Member-at-Large, ACM Symp. on Principles of Distributed Computing (PODC), Jul 2003 – Jul 2006.
 Member, Int'l Symp. on DIStributed Computing (DISC), Sep 2008 – Sep 2011.
 Member, IEEE/IFIP Int'l Conf. on Dependable Systems and Networks (DSN) and IEEE Technical Committee for Dependability and Fault Tolerance Executive Committee, Jan 2011 – Dec 2012.
 Member, ACM Symp. on Principles of Distributed Computing (PODC), Jul 2017 – Jul 2020.

Workshop Organizer

1st W'shop on Large-Scale Distributed Systems and Middleware (LADIS'07), Haifa, Israel, Mar 2007; with Gregory Chockler, Eliezer Dekel, and Roy Friedman.
3rd Bertinoro W'shop on Future Directions in Distributed Computing (FuDiCo III): Building MAD Systems, Bertinoro, Italy, Jun 2007; with Lorenzo Alvisi and Mike Dahlin.
4th Israeli Networking Seminar, Cisco, Natanya, Israel, May 2008; with Shlomi Dolev.
Israeli Chip MultiProcessor (CMP) Day III, Haifa, Israel, Feb 2009; with Avi Mendelson and Nir Shavit.

Program Committee Vice-chair

Vice-chair, *Distributed Systems and Algorithms* topic, Euro-Par 2005.
 Vice-chair, *Fault Tolerant and Dependable Systems* area, 23rd IEEE Int'l Conf. on Distributed Computing Systems (ICDCS'03), May 2003.
 Co-vice-chair, *Distributed Algorithms* area, 21st IEEE Int'l Conf. on Distributed Computing Systems (ICDCS'01), Apr 2001.

Program Committee Member

PPoPP'19, Feb 2019 (chair).
 PODC'18, Jul 2018 (chair).
 PPOPP'18, Feb 2018.
 EuroSys'17, Apr 2017.
 TRANSACT/WTTM'17 (co-chair), Feb. 2017.
 EuroSys'16, Apr 2016.

SYSTOR'15 (co-chair), Jun 2015.
 TRIOS'14, collocated with OSDI, 2014.
 EuroSys'13, Apr 2013.
 ACM PODC'12, Jul 2012.
 ACM ASPLOS'12, Mar 2012.
 ACM SPAA'11, Jun 2011.
 HotDep'10, collocated with OSDI, Oct 2010.
 IEEE/IFIP DSN/PDS'10, Jun 2010.
 SYSTOR'10, May 2010.
 DISC'09, Sep 2009 (chair).
 SYSTOR'09, May 2009.
 HotDep'08, collocated with OSDI, Dec 2008.
 USENIX OSDI'08, Dec 2008.
 IEEE/IFIP DSN/DCCS'08, Jun 2008.
 Autonomics'07, Oct 2007.
 ACM SIGACT-SIGOPS PODC'07, Aug 2007.
 IEEE ICDCS'07, Fault Tolerance and Dependability track, Jun 2007.
 IEEE/IFIP DSN/DCCS'06, Jun 2006.
 SIROCCO'06, Jul 2006.
 IWDDS W'shop, collocated with ICDCS'06, Jul 2006.
 Euro-Par 2005, Aug-Sep 2005 (vice-chair).
 ACM SIGACT-SIGOPS PODC'04, Jul 2004.
 WWW2004, Performance and Reliability track, May 2004.
 ACM-SRS W'shop, Oct 2003, collocated with CCS-10.
 ACM SIGPLAN PPOPP'03 Jun 2003.
 IEEE ICDCS'03, Fault Tolerant and Dependable Systems Track, May 2003 (vice chair).
 ACM SIGACT-SIGOPS PODC'02, Jul 2002.
 IPDPS'02, (IEEE and ACM), Apr 2002.
 ACM SIGACT-SIGOPS PODC'01, Aug 2001.
 IEEE ICDCS'01, Distributed Algorithms Track, Apr 2001 (vice chair).
 IEEE FTPDS W'shop, collocated with IPDPS'01, 2001.
 DISC'00, Oct 2000.
 IEEE FTPDS W'shop, collocated with IPDPS'00, 2000.

Advisory Board Member The Euro-Par Conf. Series Advisory Board, since 2006.

Award Committee Chair Principles of Distributed Computing Dissertation Award, 2018.

Award Committee Member Rothschild Prize, 2015-2018.

ACM PODC and EATCS DISC Edsger W. Dijkstra Prize in Distributed Computing, 2009, 2014, and 2018.

Departmental Activities

Current activities

Associate Dean for Graduate Studies, since August 2014.

Member, Computer Engineering Track Reevaluation Committee, since Oct 2012.

Member, Viterbi Donation Steering Committee, since Dec 2015.

Academic head the Networked Software Systems Laboratory, since Sep 2004.

Former activities

Member, Technion TCE Academic Appointment Committee, May 2012 – March 2014.

Member, Graduate Studies Committee, Apr 2008 – March 2014; member of PhD student admission sub-committee since Jan 2009.

Member, Academic Development (Search) Committee, Oct 2008 - May 2012.

Chair, Department Representation Committee, Oct 2007 – Nov 2008. Responsible for the department's representation on the web since Oct 2002.

Academic advisor for two undergraduate students in the Technion excellence program, 2004 – 2008.

Led **evaluation and revision of undergraduate Computer Engineering curricula**, 2007.

Led a project **revamping the department's web page**, 2006–2008.

Member, Kasher project awards committee, 2006–2007.

Member, committee for termination of studies, Nov 2005 – Jan 2006.

Member, joint CS-EE Computer Engineering track committee, Oct 2004 – Nov 2006.

Member, committee for encouraging women to study engineering, Oct 2002 – Nov 2006. **Chaired** the committee in the academic year 2002–2003. Organized an open day for female high school students.

Advisor (Consultant) to undergraduate Computer Engineering students, Oct 2002 – Nov 2006.

Invited Presentations

Keynote/Plenary Lectures

Reliable Distributed Storage, Keynote Lecture, The 3rd Annual Int'l Systems and Storage Conf. (SYSTOR'10), May 2010.

Invited talk, *60th Birthday celebration of Danny Dolev and Eli Gafni*, at the 29th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC), Jul 2010, Zurich, Switzerland.

Dynamic Computations in Ever-Changing Networks, Invited Talk, 3rd Workshop on Theoretical Aspects of Dynamic Distributed Systems (TADDS'11) Sep 2011, Rome, Italy .

On Locality and NUMA Effects in STM and Other Libraries, Invited Talk, TransForm/Euro-TM 3rd Workshop on the Theory of Transactional Memory (WTTM'11), Sep 2011, Rome, Italy.

The subtle differences among models with infinitely many processes, Invited Talk, Workshop on Theoretical Aspects of Dynamic Distributed Systems (TADDS'14), Jul 2014, Paris, France.

On Correctness of Concurrent Data Structures under Reads-Write Concurrency, Invited Talk, EuroTM 6th Workshop on the Theory of Transactional Memory (WTTM'14), Jul 2014, Paris, France.

Space Bounds for Reliable Storage: Fundamental Limits of Coding, Keynote Lecture, Int'l Conf. On Principles Of Distributed Systems (OPODIS'15), Dec 2015, Rennes, France.

Space Bounds for Reliable Storage: Fundamental Limits of Coding, Invited talk, the 7th Annual Henry Taub TCE Conference *Coding for Storage and Information Systems*, Jun 2017, Technion, Haifa, Israel.

Tutorials

On the Cost of Fault-Tolerant Consensus When There Are No Faults, with Sergio Rajsbaum, at the 21st ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC), Jul 2002, Monterey, California.

Also presented (by my co-author Sergio Rajsbaum) at the 1st Latin American Symp. on Dependable Computing (LADC), São Paulo, Brazil, Oct 2003, and at the 2nd French-Mexican School on Cooperative Distributed Systems, Sep–Oct 2003, IRISA, Campus de Beaulieu Rennes, France.

Local computations in large-scale sensor and wireless mesh networks (WMNs), at the Minema Winter School, Anzere, Switzerland, Feb 2007.

Distributed Storage Reconfiguration, with Alexander Spiegelman and Dahlia Malkhi, given by Alexander Spiegelman at the Int'l Conf. On Principles Of Distributed Systems (OPODIS'15), Dec 2015, Rennes, France.

Colloquia and Seminars

MIT EECS department Special Seminar.

MIT Theory of Computation seminar.

MIT Theory of Distributed Systems Group seminar (3 times).

EPFL Distributed Programming Laboratory and Programming Methods Laboratory, colloquium (twice).

Brown University, CS department colloquium.

Tel Aviv University, CS department colloquium.

Hebrew University, CS department colloquium.

University of Connecticut, invited lecture.

Ben-Gurion University, seminar.

Cornell University, seminar (4 times).

University of California at Berkeley, seminar.

Emory University, seminar.

BBN Technologies, invited lecture (twice).

AT&T Research, Murry Hill, NJ, invited lecture.

IBM Almaden Research Center, invited lecture.

KTH, Stockholm, Sweden, invited lecture.

Vrije University, Netherlands, invited lecture.

Sapienza University, Rome, invited lecture.

Yahoo! University, Sunnyvale, invited lecture.

University of Texas at Austin, invited lecture.

RiSE Seminar, TU Vienna.

VMWare Research Group, Palo Alto, CA.

Invited Conference and Workshop Presentations

- I. Keidar and K. Marzullo. **The Need for Realistic Failure Models in Protocol Design.** *Position paper in the 4th Information Survivability W'shop (ISW)* (sponsored by IEEE) 2001/2002, Vancouver, Canada, Mar 2002.
- I. Keidar. **Challenges in Evaluating Distributed Algorithms.** In the *Int'l W'shop on Future Directions in Distributed Computing (FuDiCo)*, Bertinoro, Italy, Jun 2002.

- G. Badishi, I. Keidar, and R. Melamed. **Towards Survivability of Application-Level Multicast.** In the *2nd Bertinoro W'shop on Future Directions in Distributed Computing (FuDiCo II): S.O.S. Survivability: Obstacles and Solutions*, Bertinoro, Italy, Jun 2004.
- G. Chockler, I. Keidar, and D. Malkhi. **Optimal Resilience Wait-Free Storage from Byzantine Components: Inherent Costs and Solutions.** In the *2nd Bertinoro W'shop on Future Directions in Distributed Computing (FuDiCo II): S.O.S. Survivability: Obstacles and Solutions*, Bertinoro, Italy, Jun 2004.
- I. Keidar, R. Melamed, and A. Orda. **EquiCast: Efficient Multicast with Selfish Users.** In the *DYNAMO W'shop: Dynamic Communication Networks: Foundations and Algorithms*, co-located with DISC 2005, Cracow, Poland, Sep 2005.
- R. Melamed and I. Keidar. **Scalable and Robust Content Distribution.** In IBM Systems and Storage Seminar, Haifa, Israel, Dec 2005.
- I. Keidar and A. Shraer. **Timeliness, Failure Detectors, and Consensus Performance.** In the *Perspectives on Dependability W'shop*, Austin, Texas, Feb 2006.
- E. Bortnikov, I. Cidon, and I. Keidar. **Nomadic Service Points.** In the *2nd Israeli Networking Seminar*, Cisco, Natanya, Israel, Apr 2006.
- G. Badishi, A. Herzberg, and I. Keidar. **Denial of Service? Leave it to Beaver!** In *Dagstuhl seminar*, "From Security to Dependability", Sep 2006.
- G. V. Chockler, R. Guerraoui, I. Keidar, and M. Vukolić. **Secure Distributed Storage: Recent Results and Open Problems.** In *Dagstuhl seminar*, "From Security to Dependability", Sep 2006.
- G. V. Chockler, R. Guerraoui, and I. Keidar. **On the Space Requirements of Robust Storage Implementations.** In *Dagstuhl seminar*, "From Security to Dependability", Sep 2006.
- I. Keidar. **Local Computations in Large-Scale Networks.** In the *W'shop on Large-Scale Distributed Systems and Middleware (LADIS'07)*, Haifa, Israel, Mar 2007.
- E. Bortnikov, M. Gurevich I. Keidar, G. Kliot, and A. Shraer. **Brahms: Byzantine Resilient Random Membership Sampling.** In the *3rd Bertinoro W'shop on Future Directions in Distributed Computing (FuDiCo III): Building MAD Systems*, Jun 2007.
- E. Bortnikov, I. Cidon, and I. Keidar. **Scalable Load-Distance Balancing.** In the *2nd W'shop on Locality Preserving Distributed Computing Methods (LOCALITY 2007)*, Aug 2007, co-located with ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC'07).
- A. Shraer, S. Bercovici, G. Chockler, I. Keidar, R. Melamed, Y. Tock, and R. Vitenberg. **Local Building Blocks for a Scalable Pub/Sub Infrastructure.** In the *2nd W'shop on Locality Preserving Distributed Computing Methods (LOCALITY 2007)*, Aug 2007, co-located with ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC'07).
- E. Bortnikov, M. Gurevich I. Keidar, G. Kliot, and A. Shraer. **Brahms: Byzantine Resilient Random Membership Sampling.** In the *5th Israeli Networking Seminar*, Cisco, Natanya, Israel, Apr 2009.
- I. Keidar and D. Perelman. **On Maintaining Multiple Versions in STM.** In *What theory for transactional memory?* W'shop, Sep 2009, Elche, Spain, co-located with DISC 2009.

- C. Cachin, I. Keidar, and A. Shraer. **From Byzantine-Tolerant to Intrusion-Safe Services**. In *BFTW³: Why? When? Where? W'shop on Theory and Practice of Byzantine Fault Tolerance*, Sep 2009, Elche, Spain, co-located with DISC 2009.
- I. Keidar. **On Multi-Versioning in Transactional Memory**. In *EuroTM 1st Plenary Meeting*, May 2011, Paris, France.
- I. Keidar. **Threads vs. Caches: Modeling the Behavior of Parallel Workloads**. In *Computer Systems Design for the 21st Century*, mini-symposium with speakers from the ASPLOS'12 program committee, Rochester, NY, Oct 2011.
- E. Gidron, I. Keidar, D. Perelman and Y. Perez. **SALSA: Scalable and Low Synchronization NUMA-aware Algorithm for Producer-Consumer Pools**. In *Dagstuhl seminar*, "Abstractions for scalable multi-core computing", Apr 2012.
- S. Patterson, Y. Eldar, and I. Keidar. **Distributed Compressed Sensing in Dynamic Networks**. In 2013 IEEE *GlobalSIP Symp.* on Network Theory.
- A. Spiegelman, G. Golan-Gueta and I. Keidar. **Transactional Data Structure Libraries**. **Highlight paper** in SYSTOR, Jun 2016.
- A. Spiegelman, G. Golan-Gueta and I. Keidar. **Transactional Data Structure Libraries**. In 8th Workshop on the Theory of Transactional Memory (WTTM'16), Jul 2016, Chicago, Illinois, USA.
- I. Keidar. **Dynamic Memory - It's Time to Talk About Complexity**. In BIRS Workshop on Complexity and Analysis of Distributed Algorithms, Nov 2016, Oaxaca, MEX.

Awards and Honors

- PLDI'16 Distinguished Paper Award, 2016.
- Henry M. Taub Award for Academic Excellence, 2016.
- Yanai Award for Excellence in Academic Education, 2013.
- IBM Faculty Award, IBM International, 2011.
- Muriel and David Jackow Award for Excellence in Teaching, 2010.
- David Dudi Ben-Aharon Research Award, 2009.
- SPAA'08 Best Paper Award, 2008.
- Citations for Excellence in Teaching, Winter 2007–2008 and Winter 2008–2009.
- Google Research Award, 2007.
- IBM Faculty Award, IBM International, 2006, renewed 2007.
- Allon Fellowship for young scientists the Israeli Council for Higher Education, 2001 – 2004.
- Technion Management Career Development Chair (CDC), the Technion, Israel 2001 – 2003.
- Outstanding Service Award, 21st IEEE Int'l Conf. on Distributed Computing Systems (ICDCS), 2001.
- NSF CISE Postdoctoral Fellowship in Experimental Computer Science, Aug 1999 – Jul 2001.
- Rothschild Yad-Hanadiv fellowship for postdoctoral studies in any discipline, 1998 – 1999.
- Israeli Ministry of Science **Eshkol** Scholarship, Nov 1996 – Nov 1998.
- Leibnitz** Scholarship for Ph.D. students, Oct 1994 – Jun 1996.
- Wolf** Foundation Prize for Ph.D. students, Jan 1996.
- Intel** Israel Prize for Ph.D. students, Jun 1994.
- M.Sc. **Summa cum laude**, Computer Science, Apr 1994.
- Hebrew University, Faculty of Mathematics and Natural Sciences Awards for M.Sc. students, 1992 and 1993.

Hebrew University **Rector's Prize** for M.Sc. students, Jan 1993.
 B.Sc. **Summa cum laude**, Computer Science and Mathematics, Aug 1992.
 Hebrew University **Dean's Honor Lists**, 1991, 1992, and 1993.
 Hebrew University **Rector's Prize**, Dec 1991.
 Tel Aviv University **Dean's Honor List**, Summer 1990.

Research Grants

Technion Funds for Security Research *Surviving Core Failures in Operating Systems*, 40K NIS 2016–2017.

Hasso Platner Institute (HPI) Center *Scalable Computing - Software and Architecture*, 2015–2020.
 Center speaker. Additional members: H. Attiya, Y. Birk, Y. Etsion, R. Friedman, R. Ginosar, I. Keslassy, A. Kolodny, A. Schuster, and M. Silberstein. Approximately 270K Euro a year.

Israeli Ministry of Science, Israeli-French High Council for Scientific and Technological Research, *Cognizant Abstractions for Efficient Cloud Usage*, 296K ILS for two years, 2014–2015, with S. Kutten.
 French partners J. Beauquier, J. Burman, and A. Korman.

The Royal Society International Exchanges Scheme, *Scalable Software for Multicores*, 12K GBP for two years, 2014–2015, with G. Chockler.

General Motors Corp. *Ubiquitous Sensing with Vehicle Networks II*, 63K USD for two years, starting May 2013, with Y. Eldar.

Technion Autonomous Systems Program (TASP) *Self Monitoring of Mobile Autonomous Agents and their Environment*, 20K USD a year, Aug 2012 – Jul 2014. Joint with Shay Kutten.

Intel Corporation *Heterogeneous Computing Platforms – Power Management, Scheduling, Software Model and Data Sharing*, 350K USD a year for two years, starting Jul 2012. In collaboration with Y. Etsion, I. Keslassy, S. Mannor, D. Tsafir, and U. Weiser.

Intel Corporation *Brain-Inspired Computing: Dynamic self-configurable architectures for intelligent learning agents*, 150K USD for one year, starting Jul 2012. Joint with R. Meir, I. Keslassy, A. Kolodny, S. Marom, A. Orda, and N. Ziv. In collaboration with N. Tishby (HUJI), B. Ginzburg (Intel), A. Globerson (HUJI), and E. Vaadia (HUJI).

General Motors Corp. *Ubiquitous Sensing with Vehicle Networks*, 63K USD for two years, starting Jan 2012.

Israel Science Foundation (ISF) *Dynamic Controlling and Monitoring in Highly Dynamic Networks*, 230K NIS a year for four years, starting Oct 2011. Joint with S. Kutten.

IBM Faculty Award *Solutions for CloudBoost: A Power-Efficient Cloud Data Store*, 40K USD for one year, 2011.

Intel Corporation *Heterogeneous Computing the Inevitable Solution: Power Management, Scheduling, and ISA*, 150K USD for one year, starting Sep 2010. Joint with I. Cidon, R. Ginosar, I. Keslassy, A. Kolodny, and U. Weiser.

Technion Autonomous Systems Program (TASP) *Self Monitoring of Mobile Autonomous Agents and their Environment*, 30K USD for two years, July 2010 – Jun 2012. Joint with Shay Kutten.

Technion Funds for Security Research *Rapidly Deployable Wireless Mesh Networks at the Battle Field*, around 150K NIS a year for three years, March 2009– Mar 2012.

Hasso Platner Institute (HPI) Center *Scalable Computing - Software and Architecture*, 2010–2015. Joint with H. Attiya, Y. Birk, I. Cidon, R. Friedman, R. Ginosar, I. Keslassy, A. Kolodny, A. Schuster, and U. Weiser. 230K Euro a year.

Semiconductors Research Corporation (SRC) *Innovative cache structures and architectures for multi-threaded applications in multi-core chips*, 180K USD for three years, starting Nov 2008. Joint with I. Cidon, A. Kolodny, R. Ginosar, and U. Weiser.

Magnet Consortium – Israeli Ministry of Industry, Trade, and Labor, *Rapidly Deployable Wireless Mesh Networks for RESCUE*, 300K NIS a year, for five years, starting Jul 2008. Joint with I. Cidon.

Israeli Ministry of Science and Technology *Knowledge Center: Infrastructure for CMP (Chip Multi-Processor) Research*, 500K NIS a year, for three years, starting Dec 2007; 10% acceptance rate (6 of 58 proposals funded). Knowledge Center Manager. Co-manager: U. Weiser.

Intel Corporation Research Council *Interconnected Multi-Core Processor Architecture*, 80K USD a year for three years, starting Oct 2007. Joint with I. Cidon, R. Ginosar, A. Kolodny, and U. Weiser.

Google Research Award *Foundations of Reliable Distributed Storage*, 20K USD, 2007.

IBM Faculty Award *Overlay Networks for Scalable and Dependable Publish-Subscribe Solutions*, 20K USD a year, 2006 and 2007.

Technion-Haifa University Joint Research Grant *Groupware services for mobile Wireless Networks*, 7K USD, 2006. Joint with I. Cidon and Z. Naor.

Intel Corporation Research Council *Interconnected Multi-Core Processor Architecture*, 80K USD a year for three years, starting Oct 2004. Joint with I. Cidon, R. Ginosar, and A. Kolodny.

Israel Science Foundation (ISF) *Group Communication in Wireless Mobile Ad-Hoc Networks*, 55K USD a year, for four years, starting Oct 2003. Joint with R. Friedman.

Intel Corporation Research Council Wireless Communications and Computing Group, *Middleware Services for Wireless PCA Environments*, 80K USD a year, for two years, starting Nov 2002. Joint with I. Cidon, R. Friedman, and A. Segall.

Publication List

My publications are available online from my web page: <http://www.ee.technion.ac.il/people/idish>. (*) Indicates that a revised and extended version has been published elsewhere.

Theses

- [T1] I. Keidar. **A Highly Available Paradigm for Consistent Object Replication**. *Master's thesis, Institute of Computer Science, The Hebrew University of Jerusalem, Jerusalem, Israel, 1994*. Also *Technical Report CS95-5*. Supervised by Prof. Danny Dolev.
- [T2] I. Keidar. **Consistency and High Availability of Information Dissemination in Multi-Processor Networks**. *Ph.D. dissertation, Institute of Computer Science, The Hebrew University of Jerusalem, Jerusalem, Israel, 1998*. Supervised by Prof. Danny Dolev.

Refereed Journal Articles

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- [C53] (*) M. Silberstein, B. Ford, I. Keidar and E. Witchel. **GPUfs: Integrating a File System with GPUs**. Proceedings, *18th Int'l Conf. on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, Houston, Texas, Mar 2013; (23% acceptance rate).
- [C54] S. Patterson, Y. Eldar, and I. Keidar. **Distributed Sparse Signal Recovery For Sensor Networks**. Proceedings, *38th Int'l Conf. on Acoustics, Speech, and Signal Processing (ICASSP)*, Vancouver, Canada, May 2013.
- [C55] I. Eyal, I. Keidar, S. Patterson, and R. Rom. **In-Network Analytics for Ubiquitous Sensing**. Proceedings, *27th Int'l Symp. on Distributed Computing (DISC), Lecture Notes in Computer Science* Volume 8205, (Advanced Research in Computing and Software Science series), pp. 512–526, Jerusalem, Israel, Oct 2013; (25% acceptance rate).
- [C56] S. Patterson, Y. Eldar, and I. Keidar. **Distributed Compressed Sensing in Dynamic Networks**. Proceedings, *1st IEEE Global Conf. on Signal and Information Processing (GlobalSIP'13)*, Austin, Texas, Dec 2013.
- [C57] K. Lev-Ari, G. Chockler, and I. Keidar. **On Correctness of Data Structures under Read-Write Concurrency**. Proceedings, *Int'l Symp. on Distributed Computing (DISC)*, pp. 273–287, Austin, Texas, Oct 2014; (23% acceptance rate).
- [C58] G. Golan-Gueta, E. Bortnikov, E. Hillel, and I. Keidar. **Scaling Concurrent Log-Structured Data Stores**. In *EuroSys*, Bordeaux, France, Apr 2015; (21% acceptance rate).
- [C59] K. Lev-Ari, G. Chockler, and I. Keidar. **A Constructive Approach for Proving Data Structures' Linearizability**. Proceedings, *Int'l Symp. on Distributed Computing (DISC)*, pp. 356–370, Tokyo, Japan, Oct 2015; (29% acceptance rate).
- [C60] M. Arbel, G. Golan-Gueta, E. Hillel, and I. Keidar. **Towards Automatic Lock Removal for Scalable Synchronization**. Proceedings, *Int'l Symp. on Distributed Computing (DISC)*, pp. 170–184, Tokyo, Japan, Oct 2015; (29% acceptance rate).
- [C61] N. Shalev, E. Harpaz, H. Porat, I. Keidar, and Y. Weinsberg. **CSR: Core Surprise Removal in Commodity Operating Systems**. Proceedings, *21st Int'l Conf. on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, Atlanta, GA, USA, Apr 2016; (22% acceptance rate).
- [C62] A. Spiegelman, G. Golan-Gueta and I. Keidar. **Transactional Data Structure Libraries**. Proceedings, *37th Annual ACM SIGPLAN Conf. on Programming Language Design and Implementation (PLDI)*, Santa Barbara, CA, USA, Jun 2016; (16% acceptance rate). **PLDI'16 Distinguished Paper Award**.
- [C63] K. Lev-Ari, E. Bortnikov, I. Keidar, and A. Shraer. **Modular Composition of Coordination Services**. Proceedings, *Usenix Annual Technical Conference (ATC)*, Denver, Co, USA, Jun 2016; (19% acceptance rate).
- [C64] A. Spiegelman, Y. Cassuto, G. Chockler, and I. Keidar. **Space Bounds for Reliable Storage: Fundamental Limits of Coding**. Proceedings, *ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, Chicago, IL, USA, Jul 2016; (29% acceptance rate).
- [C65] N. Kraus, D. Carmel, I. Keidar, and M. Orenbach. **NearBucket-LSH: Efficient Similarity Search in P2P Networks**. Proceedings, *9th Int'l Conf. on Similarity Search and Applications (SISAP)*, Tokyo, Japan, Oct 2016; (38% acceptance rate).

- [C66] A. Spiegelman and I. Keidar. **Dynamic Atomic Snapshots**. Proceedings, *20th Int'l Conf. on Principles of Distributed Systems (OPODIS)*, Madrid, Spain, Dec 2016; (37% acceptance rate). **Invited to Special Issue of Theoretical Computer Science (TCS) with selected papers from OPODIS'16.**
- [C67] D. Basin, E. Bortnikov, A. Braginsky, G. Golan-Gueta, E. Hillel, I. Keidar, and M. Sulamy. **KiWi: A Key-Value Map for Scalable Real-Time Analytics**. Proceedings, *22nd ACM SIGPLAN Symp. on Principles and Practice of Parallel Programming (PPoPP)*, Austin, Texas, Feb 2017; (22% acceptance rate).
- [C68] O. Shacham, F. Perez-Sorrosal, E. Bortnikov, E. Hillel, I. Keidar, I. Kelly, M. Morel, and S. Paranjpye. **Omid, Reloaded: Scalable and Highly-Available Transaction Processing**. Proceedings, *15th USENIX Conf. on File and Storage Technologies (FAST)*, Santa Clara, CA, Feb 2017; (24% acceptance rate).
- [C69] A. Spiegelman and I. Keidar. **On Liveness of Dynamic Storage**. Proceedings, *24th Int'l Colloquium on Structural Information and Communication Complexity (SIROCCO)*, Porquerolles, France, Jun 2017.
- [C70] A. Spiegelman, I. Keidar, and D. Malkhi. **Dynamic Reconfiguration: Abstraction and Optimal Asynchronous Solution**. Proceedings, *31st Int'l Symp. on Distributed Computing (DISC)*, Vienna, Austria, Oct 2017; (23% acceptance rate).
- [C71] N. Shalev, I. Keidar, Y. Weinsberg, Y. Moatti, and E. Ben-Yehuda. **WatchIT: Who Watches Your IT Guy?** Proceedings, *26th ACM Symp. on Operating Systems Principles (SOSP)*, Shanghai, China, Oct 2017; (16% acceptance rate).
- [C72] N. Kraus, D. Carmel, and I. Keidar. **Fishing in the Stream: Similarity Search over Endless Data**. Short paper in Proceedings, *IEEE Big Data*, Boston, MA, USA, Dec 2017; (20% acceptance rate).
- [C73] A. Berger, I. Keidar, and A. Spiegelman. **Integrated Bounds for Disintegrated Storage**. Proceedings, *32nd Int'l Symp. on Distributed Computing (DISC)*, New Orleans, USA, October 2018; (24% acceptance rate).

Refereed Workshop Proceedings

- [W1] T. Anker, G. V. Chockler, I. Keidar, M. Rozman, and J. Wexler. **Exploiting Group Communication for Highly Available Video-On-Demand Services**. Proceedings, *13th Int'l Conf. on Advanced Science, and Technology (ICAST) and the 2nd Int'l Conf. on Multimedia Information Systems (ICMIS), and IEEE Yuforic on Multimedia Information Systems*, pp. 265–270, Schaumburg, Illinois, Apr 1997.
- [W2] T. Anker, G. V. Chockler, D. Dolev, and I. Keidar. **The Caelum Toolkit for CSCW: The Sky is the Limit**. Proceedings, *3rd Int'l W'shop on Next Generation Information Technologies and Systems (NGITS)*, pp. 69–76, Neve Ilan, Israel, Jun 1997.
- [W3] T. Araragi, P. Attie, I. Keidar, K. Kogure, V. Luchangco, N. Lynch, and K. Mano. **On Formal Modeling of Agent Computations**. Proceedings, *1st NASA W'shop on Formal Approaches to Agent-Based Systems (FAABS)*, pp. 48–62, FAABS 2000 Greenbelt, Maryland, Apr 2000. Springer Verlag Lecture Notes in Artificial Intelligence 1871.

- [W4] A. Fekete and I. Keidar. **A General Framework for Highly Available Services Based on Group Communication**. Proceedings, *21st Int'l Conf. on Distributed Computing Systems Workshops (ICDCS-21W)*; the *Int'l Workshop on Applied Reliable Group Communication (WARGC)*, pp. 57–62, Phoenix, Arizona, Apr 2001.
- [W5] S. Bercovici, Y. Frishman, I. Keidar, and A. Tal. **Decentralized Electronic Mail**. Proceedings, *Int'l Workshop on Dynamic Distributed Systems (IWDDS)*; in conjunction with the *26th Int'l Conf. on Distributed Computing Systems (ICDCS)*, Lisboa, Portugal, Jul 2006.
- [W6] (*) I. Eyal, I. Keidar, and R. Rom. **Distributed Clustering for Robust Aggregation in Large Networks**. In *5th Workshop on Hot Topics in System Dependability (HotDep)*, co-located with the *39th IEEE/IFIP Int'l Conf. on Dependable Systems and Networks (DSN)*, Estoril, Portugal, Jun 2009; (37% acceptance rate).
- [W7] (*) D. Perelman and I. Keidar. **SMV: Selective Multi-Versioning STM**. In *5th ACM SIGPLAN Workshop on Transactional Computing (TRANSACT 2010)*, Apr 2010, Paris, France, co-located with EuroSys 2010.
- [W8] A. Shraer, J.-P. Martin, D. Malkhi and I. Keidar. **Data-Centric Reconfiguration with Network-Attached Disks**. In *LADIS 2010: The 4th ACM SIGOPS/SIGACT Workshop on Large Scale Distributed Systems and Middleware*, co-located with the *29th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, pp. 21–26, Zurich, Switzerland, Jul 2010.
- [W9] D. Basin, K. Birman, I. Keidar and Y. Vigfusson. **Sources of Instability in Data Center Multicast**. In *LADIS 2010: The 4th ACM SIGOPS/SIGACT Workshop on Large Scale Distributed Systems and Middleware*, co-located with the *29th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, pp. 32–37, Zurich, Switzerland, Jul 2010.
- [W10] A. Shraer, C. Cachin, A. Cidon, I. Keidar, Y. Michalevsky, and D. Shaket. **Venus: Verification for Untrusted Cloud Storage**. In the *ACM Cloud Computing Security Workshop (CCSW'10)*, co-located with the *17th ACM Conf. on Computer and Communications Security (CCS)*, Chicago, IL, Oct 2010; (29% acceptance rate).
- [W11] N. Azuelos, Y. Etsion, I. Keidar, A. Zaks, and E. Ayguadé. **Introducing Speculative Optimizations in Task Dataflow with Language Extensions and Runtime Support**. In *Data-Flow Execution Models for Extreme Scale Computing (DFM)*, co-located with *PACT*, Sep 2012.
- [W12] I. Eyal, F. Junqueira, and I. Keidar. **Thinner Clouds with Preallocation**. In *5th USENIX Workshop on Hot Topics in Cloud Computing (HotCloud)*, San Jose, California, Jun 2013.
- [W13] I. Eyal, K. Birman, I. Keidar, and R. van Renesse. **Ordering Transactions with Prediction in Distributed Object Store**. In *7th Workshop on Large-Scale Distributed Systems and Middleware (LADIS'13)*, co-located with the *24th ACM Symposium on Operating Systems Principles (SOSP'13)*, Farmington, Pennsylvania, Nov 2013.
- [W14] O. Itzhak, I. Keidar, A. Kolodny, and U. C. Weiser. **Performance scalability and dynamic behavior of Parsec benchmarks on many-core processors**. In *4th Workshop on Systems for Future Multicore Architectures (SFMA'14)*, co-located with EuroSys 2014, Apr 2014.

- [W15] (*) N. Shalev, Y. Weinsberg, and I. Keidar. **Core Surprise Removal (CSR) in Commodity OS**. In *5th Workshop on Systems for Future Multicore Architectures (SFMA'15)*, co-located with EuroSys 2015, Apr 2015.
- [W16] (*) N. Shalev, I. Keidar, Y. Moatti, and Y. Weinsberg. **WatchIT: Who Watches Your IT Guy?** In *8th ACM CCS Int'l W'shop on Managing Insider Security Threats (ACM MIST'16)*, in conjunction with ACM CCS 2016, Vienna, Austria, Oct 2016.

Refereed Short Papers and Posters in Conferences

- [SC1] D. Dolev, R. Friedman, I. Keidar, and D. Malkhi. **Failure Detectors in Omission Failure Environments**. *Brief announcement*, proceedings, *16th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, page 286, Santa Barbara, California, Aug 1997.
- [SC2] (*) C. Livadas, I. Keidar, and N. A. Lynch. **Designing a Caching-Based Reliable Multicast Protocol**. In the *IEEE/IFIP Int'l Conf. on Dependable Systems and Networks (DSN), Fast Abstracts Supplement*, pp. B44-B45, Göteborg, Sweden, Jul 2001.
- [SC3] I. Keidar and R. Melamed. **Brief Announcement: Trilix: A Scalable Lookup System for Dynamic Environments**. Proceedings, *23rd ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, St. John's, Newfoundland, Canada, Jul 2004.
- [SC4] (*) G. Badishi, I. Keidar, and A. Sasson. **Brief Announcement: Exposing and Eliminating Vulnerabilities to Denial of Service Attacks in Secure Gossip-Based Multicast**. Proceedings, *23rd ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, St. John's, Newfoundland, Canada, Jul 2004.
- [SC5] G. Badishi, A. Herzberg, and I. Keidar. **How to Build a Dam: Fighting Application-Level DoS Attacks**. In the *IEEE/IFIP Int'l Conf. on Dependable Systems and Networks (DSN), Fast Abstracts Supplement*, Yokohama, Japan, Jun–Jul 2005.
- [SC6] (*) U. Schonfeld, Z. Bar-Yossef, and I. Keidar. **Do not Crawl in the DUST: Different URLs with Similar Text**. Poster in *15th Int'l World Wide Web Conf. (WWW2006)*, Edinburgh, UK May 2006.
- [SC7] A. Shraer, G. Chockler, I. Keidar, R. Melamed, Y. Tock, and R. Vitenberg. **Local On-Line Maintenance of Scalable Pub/Sub Infrastructure**. In the *IEEE/IFIP Int'l Conf. on Dependable Systems and Networks (DSN), Fast Abstracts Supplement*, pp. 408–409, Edinburgh, UK, Jun 2007.
- [SC8] C. Cachin, I. Keidar and A. Shraer. **Improving Efficiency and Enhancing Concurrency of Untrusted Storage**. In the *6th USENIX Conf. on File and Storage Technologies (FAST '08), work-in-progress (WiP) and poster session*, San Jose, CA, Feb 2008.
- [SC9] E. Bortnikov, I. Cidon, and I. Keidar. **Brief Announcement: Dynamic Service Assignment in Next-Generation Mobile Networks: the MAGMA Approach**. Proceedings, *27th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, page 444, Toronto, Canada, Aug 2008.
- [SC10] (*) C. Cachin, I. Keidar and A. Shraer. **Brief Announcement: Principles of Untrusted Storage: A New Look at Consistency Conditions**. Proceedings, *27th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, page 426, Toronto, Canada, Aug 2008.

- [SC11] (*) A. Berman and I. Keidar. **Low-Overhead Error Detection for Networks-on-Chip.** *SYSTOR 2009*, poster session, May 2009.
- [SC12] (*) I. Eyal, I. Keidar, and R. Rom. **Distributed Clustering for Robust Aggregation in Large Networks.** *SYSTOR 2009*, poster session, May 2009.
- [SC13] (*) Z. Guz, E. Bolotin, I. Keidar, A. Kolodny, A. Mendelson, and U. Weiser. **Many-Core vs. Many-Thread Machines: Stay Away From the Valley.** *SYSTOR 2009*, poster session, May 2009.
- [SC14] (*) D. Basin, K. Birman, I. Keidar and Y. Vigfusson. **Brief Announcement: Sources of Instability in Data Center Multicast.** Proceedings, *29th ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, page 126, Zurich, Switzerland, Jul 2010.
- [SC15] (*) I. Eyal, I. Keidar, S. Patterson, and R. Rom. **Global Estimation with Local Communication.** *SYSTOR 2012 – the 5th Int’l Systems and Storage Conf.*, poster session, Jun 2012.
- [SC16] (*) S. Patterson, Y. Eldar, and I. Keidar. **Brief Announcement: Distributed Compressed Sensing for Sensor Networks.** Proceedings, *27th Int’l Symp. on Distributed Computing (DISC), Lecture Notes in Computer Science* Volume 8205, (Advanced Research in Computing and Software Science series), pp. 585–586, Jerusalem, Israel, Oct 2013.
- [SC17] (*) I. Eyal, K. Birman, I. Keidar, and R. van Renesse. **Ordering Transactions with Prediction in Distributed Object Store.** In *24th ACM Symposium on Operating Systems Principles (SOSP’13) Poster Session*, Farmington, Pennsylvania, Nov 2013.
- [SC18] (*) E. Bortnikov, G. Golan-Gueta, E. Hillel, and I. Keidar. **Scaling Concurrent Log-Structured Data Stores.** Poster in *OSDI’14*, Broomfield, CO, Oct 2014.
- [SC19] (*) A. Spiegelman and I. Keidar. **On Liveness of Dynamic Storage with Infinitely Many Reconfigurations.** Poster in *Int’l Symp. on Distributed Computing (DISC)*, Tokyo, Japan, Oct 2015.
- [SC20] (*) A. Spiegelman, G. Golan-Gueta and I. Keidar. **Brief Announcement: Transactional Data Structure Libraries.** Proceedings, *28th ACM Symp. on Parallelism in Algorithms and Architectures (SPAA)*, Asilomar State Beach, CA, USA, Jul 2016.
- [SC21] (*) D. Basin, E. Bortnikov, A. Braginsky, G. Golan-Gueta, E. Hillel, I. Keidar, and M. Sulamy. **Brief Announcement: A Key-Value Map for Massive Real-Time Analytics.** Proceedings, *ACM SIGACT-SIGOPS Symp. on Principles of Distributed Computing (PODC)*, Chicago, IL, USA, Jul 2016.
- [SC22] R. Gelashvili, I. Keidar, A. Spiegelman, and R. Wattenhofer. **Brief Announcement: Towards Reduced Instruction Sets for Synchronization.** Proceedings, *31st Int’l Symp. on Distributed Computing (DISC)*, Vienna, Austria, Oct 2017.

Patents

- [P1] E. Bortnikov, O. Shacham, I. Keidar, E. Hillel, and S. Paranjpy. **Management of transactions in a distributed transaction system.** US Patent 9,979,734, May 2018.