

Interested in an applied research position in the areas of computer networks, SDN, and large graph analytics

Education	Ph.D., Communication Systems Engineering.		2009-
	Ben-Gurion University of the Negev, Beer Sheva, Israel.		2013
	Thesis: Algebraic Algorithms for Information Spreading.		
	M.Sc., Communication Systems Engineering.		2007-
	Ben-Gurion University of the Negev, Beer Sheva, Israel.		2009
	Graduated Summa Cum Laude.		
	Thesis: Gossip and Random Walk Techniques for Network Coding.		
	B.Sc., Communication Systems Engineering.		2001-
	Ben-Gurion University of the Negev, Beer Sheva, Israel.		2005
	Graduated Cum Laude.		
	Project: Traffic Generator Implementation on EZchip Network Processor		
Professional Knowledge	<ul style="list-style-type: none">- Algorithms simulation- Communication protocols- Wolfram Mathematica- C/C++, Python, Matlab- GraphLab (graph engine)	<ul style="list-style-type: none">- Real time programming- Linux embedded, Kernel drivers- Network processors- Machine learning- Sumo traffic simulator	
Experience	University of Texas in Austin, Postdoctoral Fellow.		2014-
	<ul style="list-style-type: none">- Network algorithms for graph engines, networks modeling.		present
	Ben-Gurion University of the Negev, Postdoctoral Fellow, Lecturer.		2013-
	<ul style="list-style-type: none">- Computer networks.		2014
	Ben-Gurion University of the Negev, Teaching Assistant, Lab Instructor.		2007-
	<ul style="list-style-type: none">- Computer networks.- Developed virtual computer networks lab based on Xen Virtualization.- Information theory.- Signal processing.		2013
	T-Labs Berlin, Telekom Innovation Laboratories, Research Intern.		2012-
	<ul style="list-style-type: none">- Software Defined Networks (SDN) - "Fast failover" in OpenFlow	2012	
	VocalTec, Software Engineer.		2005-
	<ul style="list-style-type: none">- Worked in the VoIP Gateway project.- Developed in C, Linux embedded, Real time environment.- Developed drivers on Intel IXP2350 Xscale processor.- Developed microcode for network processor IXP2350, MEv2.	2007	
	Elisra Electronic Systems, RF Electronics Technician.		2000-
			2001
Military Service	Bamtza 108, Israeli Air Forces, Electronics Technician, Team Leader.		1997-
			2000

Awards	– Kreitman Post-Doctoral Scholarship	2014
	– Excellence in teaching award, Ben-Gurion University.	2010
	– Graduated Summa Cum Laude, M.Sc. Ben-Gurion University.	2009
	– Cisco award for excellence in research and studies.	2009
	– Research Scholarship from the advisor, Dr. Chen Avin.	2009
	– Excellence Scholarship from the CSE department at BGU.	2008
	– Graduated Cum Laude, B.Sc. Ben-Gurion University.	2005

Conference Publications	L. Schiff, M. Borokhovich, S. Schmid. Reclaiming the Brain: Useful OpenFlow Functions in the Data Plane. <i>ACM Workshop on Hot Topics in Networks (HotNets), 2014.</i>
	M. Borokhovich, L. Schiff, S. Schmid. Provable Data Plane Connectivity with Local Fast Failover: Introducing OpenFlow Graph Algorithms. <i>ACM SIGCOMM Workshop on Hot Topics in Software Defined Networking (HotSDN), 2014.</i>
	C. Avin, M. Borokhovich, Z. Lotker, and D. Peleg. Distributed Computing on Core-Periphery Networks: Axiom-based Design. <i>International Colloquium on Automata, Languages, and Programming (ICALP), 2014.</i>
	M. Borokhovich, S. Schmid. How (Not) to Shoot in Your Foot with Local Fast Failover. <i>International Conference on Principles of Distributed Systems (OPODIS), 2013.</i>
	C. Avin, M. Borokhovich, Z. Lotker, and D. Peleg. Brief Announcement: Distributed MST in Core-Periphery Networks. <i>International Symposium on Distributed Computing (DISC), 2013.</i>
	C. Avin, M. Borokhovich, S. Schmid. OBST: A Self-Adjusting Peer-to-Peer Overlay Based on Multiple BSTs. <i>IEEE International Conference on Peer-to-Peer Computing (P2P), 2013.</i>
	C. Avin, M. Borokhovich, B. Haeupler, and Z. Lotker. Self-Adjusting Grid Networks to Minimize Expected Path Length. <i>International Colloquium on Structural Information and Communication Complexity (SIROCCO), 2013.</i>
	C. Avin, M. Borokhovich, Y. Hadad, E. Kantor, Z. Lotker, M. Parter, and D. Peleg. Generalized Perron-Frobenius Theorem for Multiple Choice Matrices, and Applications. <i>ACM-SIAM Symposium on Discrete Algorithms (SODA), 2013.</i>
	C. Avin, M. Borokhovich, Y. Hadad, Z. Lotker Optimal virtual traffic light placement. <i>ACM International Workshop on Foundations of Mobile Computing (FOMC), 2012.</i>

Avin Chen, Borokhovich Michael, Asaf Cohen, Zvi Lotker.
Efficient Distributed Source Coding for Multiple Receivers Via Matrix Sparsification.

IEEE International Symposium on Information Theory (ISIT), 2011.

Avin Chen, Borokhovich Michael, Keren Censor-Hillel, Zvi Lotker.
Order Optimal Information Spreading Using Algebraic Gossip.
ACM Symposium on Principles of Distributed Computing (PODC), 2011.

Borokhovich Michael, Avin Chen, Zvi Lotker.
Tight Bounds for Algebraic Gossip on Graphs.
IEEE International Symposium on Information Theory (ISIT), 2010.

Avin Chen, Borokhovich Michael, Arik Goldfeld.
Mastering (Virtual) Networks. A Case Study of Virtualizing Internet Lab.
International Conference on Computer Supported Education (CSEDU), 2009.

**Journal
Publications**

I. Mitliagkas, M. Borokhovich, A. Dimakis, C. Caramanis.
FrogWild! - Fast PageRank Approximations on Graph Engines.
Very Large Data Bases (VLDB), 2015.

C. Avin, M. Borokhovich, B. Haeupler, and Z. Lotker.
Self-Adjusting Grid Networks to Minimize Expected Path Length.
Theoretical Computer Science, 2014.

C. Avin, M. Borokhovich, Y. Haddad, E. Kantor, Z. Lotker, M. Parter, D. Peleg.
Testing the Irreducibility of Nonsquare Perron-Frobenius Systems.
Information Processing Letters, Elsevier, 2014.

M. Borokhovich, C. Avin, and Z. Lotker.
Bounds for Algebraic Gossip on Graphs.
Random Structures and Algorithms Journal (RSA), 2013.

C. Avin, M. Borokhovich, K. Censor-Hillel, and Z. Lotker.
Order Optimal Information Spreading Using Algebraic Gossip.
The International Journal of Distributed Computing (DIST), 2013.

**Papers
Under
Review**

C. Avin, M. Borokhovich, B. Haeupler, Z. Lotker, C. Scheideler, S. Schmid.
Self-Adjusting Distributed Data-structures.
Submitted to: *IEEE/ACM Transactions on Networking.*

E. Elenberg, K. Shanmugam, M. Borokhovich, A. Dimakis.
Beyond Triangles: A Distributed Framework for Estimating 3-profiles of Large Graphs.
Submitted to: *Knowledge, Discovery and Data Mining (KDD).*

Talks

Reclaiming the Brain: Useful OpenFlow Functions in the Data Plane.

ACM Workshop on Hot Topics in Networks (HotNets).

Los Angeles, USA. October 2014.

Distributed Computing on Core-Periphery Networks: Axiom-based Design.

International Colloquium on Automata, Languages, and Programming (ICALP).

Copenhagen, Denmark. July 2014.

Generalized Perron-Frobenius Theorem and Optimal Power Allocation for Multiple Transmitters.

Simons Seminar, UT Austin.

Austin, USA. April 2014.

Generalized Perron-Frobenius Theorem for Multiple Choice Matrices, and Applications.

CSE Colloquium, BGU.

Beer-Sheva, Israel. March 2014.

How (Not) to Shoot in Your Foot with Local Fast Failover.

International Conference on Principles of Distributed Systems (OPODIS).

Nice, France. December 2013.

Brief Announcement: Distributed MST in Core-Periphery Networks.

International Symposium on Distributed Computing (DISC).

Jerusalem, Israel. October 2013.

Self-Adjusting Grid Networks to Minimize Expected Path Length.

International Colloquium on Structural Information and Communication Complexity (SIROCCO).

Ischia, Italy. July 2013.

Order Optimal Information Spreading Using Algebraic Gossip.

ACM Symposium on Principles of Distributed Computing (PODC).

San Jose, USA. June 2011.

Tight Bounds for Algebraic Gossip on Graphs.

IEEE International Symposium on Information Theory (ISIT).

Austin, USA. June 2010.

Tight Bounds for Algebraic Gossip on Graphs.

10th Haifa Graph Workshop.

Haifa, Israel, May 2010.

Tight Bounds for Algebraic Gossip on Graphs.

CSE Colloquium, BGU.

Beer-Sheva, Israel. May 2010.

Mastering (Virtual) Networks. A Case Study of Virtualizing Internet Lab.

International Conference on Computer Supported Education (CSEDU).

Lisbon, Portugal. March 2009.