

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

<b>Awards</b>	– 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

## Review Activity

### Reviewed papers from the following venues:

- International Colloquium on Automata, Languages, and Programming (ICALP)
- International Symposium on Distributed Computing (DISC)
- International Colloquium on Structural Information and Communication Complexity (SIROCCO)
- IEEE International Symposium on Information Theory (ISIT)
- ACM Symposium on Principles of Distributed Computing (PODC)
- IEEE Transactions on Information Theory
- IEEE International Conference on Computer Communications (INFOCOM)
- International Conference on Distributed Computing (ICDCN)
- International Conference on Combinatorial Optimization and Applications (COCOA)
- Mathematical Foundations of Computer Science (MFCS)
- International Conference on. Mobile Ad-hoc and Sensor Networks (MSN)
- International Conference on Embedded Wireless Systems and Networks (EWSN)

## Conference Publications

M. Borokhovich, A. Chatterjee, Jason Rogers, L. R. Varshney, S. Vishwanath.  
**Improving Impact Sourcing via Efficient Global Service Delivery.**  
*Bloomberg Data for Good Exchange (D4GX), 2015.*

E. Elenberg, K. Shanmugam, M. Borokhovich, A. Dimakis.  
**Beyond Triangles: A Distributed Framework for Estimating 3-profiles of Large Graphs.**  
*ACM SIGKDD Conference on Knowledge, Discovery and Data Mining (KDD), 2015.*

L. Schiff, M. Borokhovich, S. Schmid.  
**Reclaiming the Brain: Useful OpenFlow Functions in the Data Plane.**  
*ACM Workshop on Hot Topics in Networks (HotNets), 2014.*

M. Borokhovich, L. Schiff, S. Schmid.  
**Provable Data Plane Connectivity with Local Fast Failover: Introducing OpenFlow Graph Algorithms.**  
*ACM SIGCOMM Workshop on Hot Topics in Software Defined Networking (HotSDN), 2014.*

C. Avin, M. Borokhovich, Z. Lotker, and D. Peleg.  
**Distributed Computing on Core-Periphery Networks: Axiom-based Design.**  
*International Colloquium on Automata, Languages, and Programming (ICALP), 2014.*

M. Borokhovich, S. Schmid.

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

*International Conference on Principles of Distributed Systems (OPODIS), 2013.*

C. Avin, M. Borokhovich, Z. Lotker, and D. Peleg.

**Brief Announcement: Distributed MST in Core-Periphery Networks.**

*International Symposium on Distributed Computing (DISC), 2013.*

C. Avin, M. Borokhovich, S. Schmid.

**OBST: A Self-Adjusting Peer-to-Peer Overlay Based on Multiple BSTs.**

*IEEE International Conference on Peer-to-Peer Computing (P2P), 2013.*

C. Avin, M. Borokhovich, B. Haeupler, and Z. Lotker.

**Self-Adjusting Grid Networks to Minimize Expected Path Length.**

*International Colloquium on Structural Information and Communication Complexity (SIROCCO), 2013.*

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.**

*ACM-SIAM Symposium on Discrete Algorithms (SODA), 2013.*

C. Avin, M. Borokhovich, Y. Hadad, Z. Lotker

**Optimal virtual traffic light placement.**

*ACM International Workshop on Foundations of Mobile Computing (FOMC), 2012.*

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.*

S. Schmid, C. Avin, C. Scheideler, M. Borokhovich, B. Haeupler, Z. Lotker.

**SplayNet: Towards Locally Self-Adjusting Networks.**

*IEEE/ACM Transactions on Networking (ToN), 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

A. Chatterjee, M. Borokhovich, Jason Rogers, L. R. Varshney, S. Vishwanath.  
**Efficient and Flexible Crowdsourcing of Specialized Tasks with Precedence Constraints.**

E. Elenberg, K. Shanmugam, M. Borokhovich, A. Dimakis.  
**Distributed Estimation of Graph 4-Profiles.**

M. Borokhovich, Clement Rault, L. Schiff, S. Schmid.  
**Offroad: A Robust OpenFlow Data Plane Based on In-Band Local Fast Failover.**

#### Talks

**Improving Impact Sourcing via Efficient Global Service Delivery.**  
*Bloomberg Data for Good Exchange (D4GX)*.  
NYC, US. October 2015.

**FrogWild! - Fast PageRank Approximations on Graph Engines.**  
*Very Large Data Bases (VLDB)*.  
Waikoloa (Hawaii), USA. September 2015.

**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.