

**Michael Borokhovich**

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<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. Ph.D. program completed and Ph.D. thesis submitted on Sep. 30, 2013.	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 the EZchip Network Processor.	2001- 2005
<b>Professional Knowledge</b>	<ul style="list-style-type: none"><li>- Algorithms simulation.</li><li>- Network processors.</li><li>- Wolfram Mathematica.</li><li>- C, Matlab.</li><li>- Sumo traffic simulator.</li><li>- Communication protocols.</li><li>- Real time programming.</li><li>- Linux embedded, Kernel drivers.</li><li>- Machine Learning (Stanford online course).</li></ul>	
<b>Experience</b>	Ben-Gurion University of the Negev, <b>Postdoctoral Fellow, Lecturer.</b> <ul style="list-style-type: none"><li>- Computer Networks.</li></ul>	2013- present
	Ben-Gurion University of the Negev, <b>Teaching Assistant, Lab Instructor.</b> <ul style="list-style-type: none"><li>- Computer Networks.</li><li>- Developed virtual computer networks lab based on Xen Virtualization.</li><li>- Information Theory.</li><li>- Signal Processing.</li></ul>	2007- 2013
	T-Labs Berlin, Telekom Innovation Laboratories, <b>Intern</b> (Summer Internship) <ul style="list-style-type: none"><li>- Developed routing algorithms for Software Defined Networks (SDN).</li></ul>	2012- 2012
	VocalTec, <b>Software Engineer.</b> <ul style="list-style-type: none"><li>- Worked in the VoIP Gateway project.</li><li>- Developed in C, Linux embedded, Real time environment.</li><li>- Developed drivers on Intel IXP2350 Xscale processor.</li><li>- Developed microcode for network processor IXP2350, MEv2.</li></ul>	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>	<ul style="list-style-type: none"><li>- Kreitman Post-Doctoral Scholarship</li><li>- Excellence in teaching award – Ben-Gurion University.</li><li>- Graduated Summa Cum Laude, M.Sc. Ben-Gurion University.</li><li>- Cisco award for excellence in research and studies.</li><li>- Research Scholarship from the instructor, Dr. Chen Avin.</li><li>- Excellence Scholarship from the CSE department at BGU.</li><li>- Graduated Cum Laude, B.Sc. Ben-Gurion University.</li></ul>	2014 2010 2009 2009 2009 2008 2005

**Conferences  
Publications**

- 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.*

**Journals  
Publications**

- 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.*

**Presentations**    **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.

**Papers  
Under  
Review**

C. Avin, M. Borokhovich, A. Cohen, and Z. Lotker.

**Efficient Joint Network-Source Coding for Multiple Terminals with Side Information.**

Submitted to: *IEEE Transactions on Communications.*

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

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

Submitted to: *Theoretical Computer Science.*

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

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

Submitted to: *ICALP.*