

Rotem Oshman

curriculum vitae

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Education

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| 2012-present | Post-doctorate in the Theory Group
Computer Science Department
University of Toronto |
| 2008-2012 | PhD in Computer Science
Massachusetts Institute of Technology
Advised by Prof. Nancy Lynch |
| 2005-2007 | MSc in Computer Science, <i>Magna cum Laude</i>
Technion – Israel Institute of Technology
Advised by Prof. Orna Grumberg
MSc Defense Score: 98/100 GPA: 97.5/100 |
| 2000, 2003-2005 | BA in Computer Science, <i>Magna cum Laude</i>
Technion – Israel Institute of Technology
GPA: 95.5/100 Class rank: 1 st of 62 |

Work Experience

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| Summer 2010 | Internship at Microsoft Research Redmond |
| Summer 2005 | Internship at the Formal Methods Group, IBM Haifa Research Lab |
| 2003-2005 | Student position at Rafael, Advanced Defense Systems |

Teaching Experience

- 2004-2008 Technion – Israel Institute of Technology, Haifa, Israel
Teaching Assistant and Lead Teaching Assistant in:
236360 Theory of Compilation
234293 Logic and Set Theory
236342 Introduction to Software Verification
- Won the Excellence in Teaching award 3 times.
- 2010, 2012 MIT – Massachusetts Institute of Technology
Lead Teaching Assistant in:
6.885 Distributed Algorithms for Mobile Wireless Ad Hoc Networks
6.045 Automata, Computability, & Complexity (“Great Ideas in Computer Science”)

Scholarships and Awards

- Summer 2011 PODC Best Student Presentation Award
- Winter 2009 Eli and Dorothy Berman Fellowship
Massachusetts Institute of Technology
- 2008-2009 Akamai Presidential Fellowship
Massachusetts Institute of Technology
- 2006-2007 Excellence in Teaching Award (awarded 3 times)
Technion – Israel Institute of Technology
- 2005-2006 Guttweirth Special Scholarship for MSc Students
Technion – Israel Institute of Technology
- 2004-2005 Excellence in Computer Science Scholarship (awarded 3 times)
Technion – Israel Institute of Technology

Publications

Rotem Oshman. **Distributed Computation in Wireless and Dynamic Networks**. PhD Thesis, available online: <http://groups.csail.mit.edu/tds/papers/Oshman/Thesis.pdf>

Andrew Drucker, Fabian Kuhn and Rotem Oshman. **The Communication Complexity of Distributed Task Allocation**. In the 31st Annual ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2012).

Fabian Kuhn, Rotem Oshman. **Dynamic networks: models and algorithms**. SIGACT News 42(1): 82-96 (2011).

Fabian Kuhn and Rotem Oshman. **The Complexity of Data Aggregation in Directed Networks**. In the 25th International Symposium on Distributed Computing (DISC 2011).

Fabian Kuhn, Yoram Moses and Rotem Oshman. **Coordinated Consensus in Dynamic Networks**. In the 30th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2011).

Thomas Moscibroda and Rotem Oshman. **Resilience of Mutual Exclusion Algorithms to Transient Memory Faults**. In the 30th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2011).

Fabian Kuhn, Thomas Locher, and Rotem Oshman. **Gradient Clock Synchronization in Dynamic Networks**. In Theory of Computing Systems, 49(4): 781-816, 2011.

Fabian Kuhn, Christoph Lenzen, Thomas Locher and Rotem Oshman. **Optimal Gradient Clock Synchronization in Dynamic Networks**. In the 20th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2010).

Fabian Kuhn, Nancy Lynch, Calvin Newport, Rotem Oshman and Andrea Richa. **Broadcasting in Unreliable Networks**. In the 20th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2010).

Fabian Kuhn, Nancy Lynch, and Rotem Oshman. **Distributed Computation in Dynamic Networks**. In 42nd ACM symposium on Theory of Computing (STOC 2010).

Fabian Kuhn and Rotem Oshman. **Gradient Clock Synchronization Using Reference Broadcasts**. In the 13th International Conference on Principles of Distributed Systems (OPODIS 2009).

Fabian Kuhn, Thomas Locher, and Rotem Oshman. **Gradient Clock Synchronization in Dynamic Networks**. In the 21st ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2009).

Rotem Oshman. **An Automata-Theoretic Completeness Criterion for Bounded Model-Checking**. In the 10th International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI 2009).

Rotem Oshman and Orna Grumberg. **A New Approach to Bounded Model Checking for Branching-Time Logics**. In the 5th International Symposium on Automated Techniques for Verification and Analysis (ATVA 2007).