List of Publications

Dana Ron

November 2021

Journal Papers

Published and in Press

- [J1] D. Ron and R. Rubinfeld, "Learning Fallible Finite State Automata", *Machine Learning, COLT93 special issue*, volume 18, number 2, pages 149–185, 1995.
- [J2] M. Ben-Or and D. Ron, "Agreement in the Presence of Faults on Networks of Bounded Degree", *Information Processing Letters*, volume 57, number 6, pages 329–334, 1996.
- [J3] D. Ron, Y. Singer, and N. Tishby, "The Power of Amnesia: Learning Probabilistic Automata with Variable Memory Length", *Machine Learning, COLT94 special issue*, volume 25, number 2, pages 117–149, 1996.
- [J4] D. Ron and R. Rubinfeld, "Exactly Learning Automata of Small Cover Time", *Machine Learning, COLT95 special issue*, volume 27, number 1, pages 69–96, 1997.
- [J5] Y. Freund, M. Kearns, D. Ron, R. Rubinfeld, R. E. Schapire, and L. Sellie, "Efficient Learning of Typical Finite Automata from Random Walks", *Information and Computation*, volume 138, number 1, pages 23–48, 1997.
- [J6] O. Goldreich and D. Ron, "On Universal Learning Algorithms", *Information Processing Letters*, volume 63, number 3, pages 131–136 1997.
- [J7] M. J. Kearns, Y. Mansour, A. Ng, and D. Ron, "An Experimental and Theoretical Comparison of Model Selection Methods", *Machine Learning, COLT95 special issue*, volume 27, number 1, pages 7–50, 1997.
- [J8] D. Ron, Y. Singer, and T. Tishby, "On the Learnability and Usage of Acyclic Probabilistic Finite Automata", Journal of Computer and System Sciences, COLT95 special issue, volume 56, number 2, pages 133–152, 1998
- [J9] O. Goldreich, S. Goldwasser, and D. Ron, "Property Testing and its Connection to Learning and Approximation", *Journal of the ACM*, volume 45, number 4, pages 653–750, 1998.
- [J10] M. Kearns and D. Ron, "Algorithmic Stability and Sanity-Check Bounds for Leave-One-Out Cross-Validation", Neural Computation, volume 11, number 6, pages 1427–1453, 1999.
- [J11] O. Goldreich and D. Ron, "A Sublinear Bipartite Tester for Bounded Degree Graphs", *Combinatorica*, volume 19, number 3, pages 335–373, 1999.
- [J12] I. Kremer, N. Nisan, and D. Ron, "On Randomized One-Round Communication Complexity", Computational Complexity, volume 8, pages 21–48, 1999.
- [J13] S. Decatur, O. Goldreich, and D. Ron, "Computational Sample Complexity", *SIAM Journal on Computing*, volume 29, number 3, pages 854–879, 1999.
- [J14] O. Goldreich, D. Ron, and M. Sudan, "Chinese Remaindering with Errors", *IEEE Transactions on Information Theory*, volume 46, number 4, pages 1330–1338, 2000.

- [J15] O. Goldreich, S. Goldwasser, E. Lehman, D. Ron, and A. Samorodnitsky, "Testing Monotonicity", *Combinatorica*, volume 20, number 3, pages 301–307, 2000.
- [J16] M. Kearns and D. Ron, "Testing Problems with Sub-Learning Sample Complexity", *Journal of Computer and System Sciences*. volume 61, no. 3, pages 428–456, 2000.
- [J17] E. Lehman and D. Ron, "On Disjoint Chains of Subsets", *Journal of Combinatorial Theory, Series A*, 94, 399–404, 2001.
- [J18] O. Goldreich and D. Ron, "Property Testing in Bounded Degree Graphs", *Algorithmica*, volume 32, no. 2, pages 302–343, 2002.
- [J19] M. Parnas and D. Ron, "Testing the Diameter of Graphs", *Random Structures and Algorithms*, volume 20, no. 2, pages 165–183, 2002.
- [J20] M. Bender, and D. Ron, "Testing Properties of Directed Graphs: Acyclicity and Connectivity", *Random Structures and Algorithms*, volume 20, no. 2, pages 184–205, 2002.
- [J21] M. Bender, A. Fernandez, D. Ron, A. Sahai, and S. Vadhan, "The Power of a Pebble: Exploring and Mapping Directed Graphs", *Information and Computation*, volume 176, pages 1–21, 2002.
- [J22] M. Parnas, D. Ron and A. Samorodnitsky, "Testing Basic Boolean Formulae", *SIAM Journal on Discrete Math*, volume 16, no. 1, pages 20–46, 2002.
- [J23] M. Parnas, D. Ron and R. Rubinfeld, "Testing Membership in Parenthesis Languages", *Random Structures and Algorithms*, volume 22, no. 1, pages 98–138, 2003.
- [J24] N. Alon, S. Dar, M. Parnas, and D. Ron, "Testing of Clustering", *SIAM Journal on Discrete Math*, volume 16, no. 3, pages 393–417, 2003.
- [J25] M. Parnas, D. Ron and R. Rubinfeld, "On Testing Convexity and Submodularity", SIAM Journal on Computing, volume 32, no. 5, pages 1158–1184, 2003.
- [J26] M. Parnas and D. Ron, "Testing Metric Properties", *Information and Computation*, volume 187, no. 2, pages 155–195, 2003.
- [J27] G. Even, Z. Lotker, D. Ron, and S. Smorodinsky, "Conflict-Free Colorings of Simple Geometric Regions with Applications to Frequency Assignment in Cellular Networks", *SIAM Journal on Computing*, volume 33, no. 1, pages 94–136, 2003.
- [J28] E. Fischer, G. Kindler, D. Ron, S. Safra, and A. Samorodnitsky, "Testing Juntas", *Journal of Computer and System Sciences* (FOCS02 special issue), volume 68, no. 4. pages 753-787, 2004.
- [J29] N. Alon, S. Dar, M. Parnas, and D. Ron, "Testing of Clustering", SIAM Review, volume 46, no. 2, pages 285–308, 2004.
 - This paper, based on [J24], was chosen as the SIGEST selection by the SIAM editors. According to the citation: "In each issue of SIAM Review, the SIGEST section contains an outstanding paper of general interest that has previously appeared in one of SIAM's specialized research journals."
- [J30] N. Mishra, D. Ron, and R. Swaminathan, "A New Conceptual Clustering Framework", *Machine Learning Journal* (special issue on Theoretical Advances in Data Clustering), volume 56, pages 115–151, 2004.
- [J31] T. Kaufman, M. Krivelevich, and D. Ron, "Tight Bounds for Testing Bipartiteness in General Graphs", *SIAM Journal on Computing*, volume 33, no. 6, pages 1441-1483, 2004.
- [J32] N. Alon, T. Kaufman, M. Krivelevich, S. Litsyn and D. Ron, "Testing Reed-Muller codes", *IEEE Transactions on Information Theory*, volume 51, no. 11, pages 4032–4039, 2005.

- [J33] T. Kaufman and D. Ron, "A Characterization of Low-Weight Words that Span Generalized Reed-Muller Codes", *IEEE Transactions on Information Theory*, volume 51, no. 11, pages 4039–4043, 2005.
- [J34] M. Parnas, D. Ron and R. Rubinfeld, "Tolerant Property Testing and Distance Approximation", *Journal of Computer and System Sciences*, volume 72, no. 6, pages 1012–1042, 2006.
- [J35] T. Kaufman and D. Ron, "Testing Polynomials over General Fields", *SIAM Journal on Computing*, volume 36, no. 3, pages 779–802, 2006.
- [J36] D. Ron and A. Rosenfeld and S. Vadhan, "The Hardness of the Expected Decision Depth Problem", *Information Processing Letters*, volume 101, no. 3, pages 112–118, 2007.
- [J37] M. Parnas and D. Ron, "Approximating the Minimum Vertex Cover in Sublinear Time and a Connection to Distributed Algorithms", *Theoretical Computer Science*, volume 381, no. 1–3, pages 183–196, 2007.
- [J38] O. Goldreich and D. Ron, "Approximating Average Parameters of Graphs", *Random Structures and Algorithms*, volume 32, no. 4, pages 473–493, 2008.
- [J39] N. Alon, T. Kaufman, M. Krivelevich and D. Ron, "Testing Triangle-Freeness in General Graphs", *SIAM Journal on Discrete Math*, volume 22, no. 2, pages 786–819, 2008.
- [J40] M. Gonen, D. Ron, U. Weinsberg, and A. Wool, "Finding a Dense-Core in Jellyfish graphs", *Computer Networks*, volume 52, no. 15, pages 2831–2841, 2008.
- [J41] D. Ron, "Property Testing: A Learning Theory Perspective", *Foundations and Trends in Machine Learning*, volume 1, no. 3, pages 307–402, 2008.
- [J42] G. Even, M. Halldórsson, L. Kaplan and D. Ron, "Scheduling with Conflicts: Online and Offline Algorithms", *Journal of Scheduling*, volume 12, no. 2, pages 199–224, 2009.
- [J43] S. Marko and D. Ron, "Approximating the Distance to Properties in Bounded-Degree and General Sparse Graphs", *Transactions on Algorithms*, volume 5, no. 2, article no. 22, 2009.
- [J44] S. Raskhodnikova, D. Ron, A. Shpilka, and A. Smith, "Strong Lower Bounds for Approximating Distribution Support Size and the Distinct Elements Problem", *SIAM Journal On Computing*, volume 39, no. 3, pages 813–842, 2009.
- [J45] M. Gonen and D. Ron, "On the Benefits of Adaptivity in Property Testing of Dense Graphs", *Algorithmica* (special issue for RANDOM and APPROX 2007), volume 58, no. 4, pages 811–830, 2010.
- [J46] D. Ron, "Algorithmic and Analysis Techniques in Property Testing". Foundations and Trends in Theoretical Computer Science, volume 5, no. 2, pages 73–205, 2010.
- [J47] S. Fattal and D. Ron, "Approximating the Distance to Monotonicity in High Dimensions", *Transactions on Algorithms*, volume 6, no. 3, article 52, 2010.
- [J48] O. Goldreich and D. Ron, "Algorithmic aspects of property testing in dense graphs", SIAM Journal on Computing, volume 4, no. 2, 376–445, 2011.
- [J49] O. Goldreich and D. Ron, "On proximity oblivious testing", *SIAM Journal on Computing*, volume 4, no. 2, pages 534–566, 2011.
- [J50] E. Dolev and D. Ron, "Distribution-Free Testing for Monomials with a Sublinear Number of Queries", in *Theory of Computing*, volume 7, article 11, pages 155–176, 2011.
- [J51] M. Gonen, D. Ron, and Y. Shavitt, "Counting Stars and Other Small Subgraphs in Sublinear Time", *SIAM Journal on Discrete Math*, volume 25, issue 3, pages 1365–1411, 2011.

- [J52] Y. Orenstein and D. Ron. "Testing Eulerianity and Connectivity in Directed Sparse Graphs", *Theoretical Computer Science*, volume 412, pages 6390–6408, 2011.
- [J53] D. Ron and G. Tsur, "Testing Computability by Width-2 OBDDs", *Theoretical Computer Science*, volume 420, pp, 64–79, 2012.
- [J54] D. Ron, R. Rubinfeld, M. Safra, and O. Weinsten, "Approximating the Influence of Monotone Boolean Functions in $O(\sqrt{n})$ Query Complexity", *ACM Transactions on Computation Theory*, volume 4, number 4, article 11, 2012.
- [J55] I. Ben-Eliezer, T. Kaufman, M. Krivelevich, and D. Ron, "Comparing the strength of query types in property testing: The case of testing *k*-colorability", *Computational Complexity*, volume 22, number 1, pp, 89–135, 2013.
- [J56] S. Raskhodnikova, D. Ron, R. Rubinfeld, and A. Smith, "Sublinear Algorithms for Approximating String Compressibility", *Algorithmica*, volume 22, number 1, pp, 89–135, 2013.
- [J57] R. Levi, D. Ron, and R. Rubinfeld, "Testing Properties of Collections of Distributions", *Theory of Computing*, volume 8, number 9, pages 295–347, 2013.
- [J58] D. Ron and G. Tsur, "On Approximating the Number of Relevant Variables in a Function", *ACM Transactions on Computation Theory*, volume 5, number 7, article number 7, 2013.
- [J59] A. Czumaj, O. Goldreich, D. Ron, C. Seshadhri, A. Shapira, and C. Sohler, "Finding cycles and trees in sublinear time", *Random Structures and Algorithms*, volume 45, number 2, pages 139–184, 2014.
- [J60] D. Ron and G. Tsur, "Testing Properties of Sparse Images", ACM Transactions on Algorithms, volume 10, number 4, article number 17, 2014.
- [J61] R. Levi, D. Ron, and R. Rubinfeld, "Testing Similar Means", SIAM Journal on Discrete Math, volume 28, number 4, pages 1699–1724, 2014.
- [J62] R. Levi and D. Ron, "A Quasi-Polynomial Time Partition Oracle for Graphs with an Excluded Minor", *ACM Transactions on Algorithms*, volume 11, number 3, article number 24, 2015.
- [J63] C. Canonne, D. Ron and R. Servedio. "Testing probability distributions using conditional samples", *SIAM Journal on Computing*, volume 44, number 3, pages 540–616, 2015.
- [J64] D. Ron and R. Servedio, "Exponentially improved algorithms and lower bounds for testing signed majorities", *Algorithmica*, volume 72, number 2, pages 400–429, 2015.
- [J65] D. Ron and G. Tsur, "The Power of an Example: Hidden set size approximation using group queries and conditional sampling", *ACM Transactions on Computation Theory*, volume 8, issue 4, article no. 15, 2016.
- [J66] O. Goldreich and D. Ron, "On Sample-Based Testers", *ACM Transactions on Computation Theory*, volume 8, issue 2, article no. 7, 2016.
 - Selected for ACM's list: "Best of computing, notable books and articles", 2016.
- [J67] R. Levi and G. Moshkovitz and D. Ron and R. Rubinfeld and A. Shapira, "Constructing near spanning trees with few local inspections", *Random Structures and Algorithms*, volume 50, issue 2, pages 183–200, 2017.
- [J68] O. Goldreich and D. Ron, "On Learning and Testing Dynamic Environments", *Journal of the ACM*, volume 64, issue 3, 21:1–21:90, 2017.
- [J69] T. Eden, A. Levi, D. Ron and C. Seshadhri, "Approximately Counting Triangles in Sublinear Time", *SIAM Journal on Computing*, volume 46, issue 5, pages 1603–1646, 2017.
- [J70] G. Even, M. Medina and D. Ron, "Best of Two Local Models: Centralized local and Distributed local Algorithms", *Information and Computation*, volume 262, part 1, pages 69–89, 2018.

- [J71] E. Blais, C. Canonne, T. Eden, A. Levi, and D. Ron, "Tolerant Junta Testing and the Connection to Submodular Optimization and Function Isomorphism", *ACM Transactions on Computation Theory*, volume 11, issue 4, article no. 24, 2019.
- [J72] M. Parnas, D. Ron and A. Shraibman, "The Boolean rank of the uniform intersection matrix and a family of its submatrices", *Linear Algebra and its Applications*, volume 574, pages 67–83, 2019.
- [J73] T. Eden, D. Ron and C. Seshadhri, "Sublinear-time Estimation of Degree Distribution Moments: The Arboricity Connection". *SIAM Journal on Discrete Math*, volume 33, number 4, pages 2267–2285, 2019.
- [J74] T. Eden, R. Levi, and D. Ron, "Testing Bounded Arboricity", *ACM Transactions on Algorithms*, volume 16, number 2, article no. 18, 2020.
- [J75] R. Levi, D. Ron, and R. Rubinfeld, "Local Algorithms for Sparse Spanning Graphs", *Algorithmica*, volume 82, number 4, pages 747–786, 2020.
- [J76] T. Eden, D. Ron and C. Seshadhri, "On Approximating the Number of k-Cliques in Sublinear Time". *SIAM Journal on Computing*, volume 49, number 4, pages 747–771, 2020.
- [J77] R. Levi, M. Medina and D. Ron, "Property Testing of Planarity in the CONGEST Model", *Distributed Computing* (in press, available online), 2020.
- [J78] O. Goldreich and D. Ron, "The Subgraph Testing Model". *ACM Transactions on Computation Theory*, volume 12, issue 4, article no. 28, pages 1–32, 2020.
- [J79] M. Parnas, D. Ron and A. Shraibman, "Property Testing of the Boolean and Binary Rank", *Theory of Computing Systems*, (in press, available online), 2021.

Book Chapters

- [B1] D. Ron, "Property Testing", in *Handbook of Randomized Computing Vol II*, Chapter 15, pages 597–649. Edited by S. Rajasekaran, P. M. Pardalos, J.H. Reif and J. Rolim, Kluwer Academic Publishers, 2001.
- [B2] D. Ron, "Sublinear-Time Algorithms for Approximating Graph Parameters", in *Computing and Software Science State of the Art and Perspectives*, pages 105–122, Edited by Bernhard Steffen and Gerhard J. Woeginger, Springer, 2019.
- [B3] S. Decatur, O. Goldreich and D. Ron, "A Probabilistic Error-Correcting Scheme that Provides Partial Secrecy", in: Computational Complexity and Property Testing, Lecture Notes in Computer Science, vol 12050, pages 1–8. Springer, 2020.
- [B4] O. Goldreich and D. Ron, "On the Relation Between the Relative Earth Mover Distance and the Variation Distance (an Exposition)", in: *Computational Complexity and Property Testing*, Lecture Notes in Computer Science, vol 12050, pages 141–151. Springer, 2020.

Invited Encyclopedia Entries

- [E1] D. Ron, "Property Testing", in *The Encyclopedia of Applied and Computational Mathematics*, pages 1181–1184, Edited by B. Engquist and M. Peters, Springer, 2015.
- [E2] O. Goldreich and D. Ron, "Estimating Simple Graph Parameters in Sublinear Time", *Encyclopedia of Algorithms*, 2nd Edition, pages 650–653, Edited by Ming-Yang Kao, Springer, 2016.
- [E3] O. Goldreich and D. Ron, "Testing Bipartiteness in the Dense-Graph Model", *Encyclopedia of Algorithms*, 2nd Edition, pages 2212–2216, Edited by Ming-Yang Kao, Springer, 2016.

[E4] O. Goldreich and D. Ron, "Testing Bipartiteness of Graphs in Sublinear Time", *Encyclopedia of Algorithms*, 2nd Edition, pages 2216–2219, Edited by Ming-Yang Kao, Springer, 2016.

Extended Papers in (Refereed) Conference Proceedings

- [C1] Y. Freund, M. Kearns, D. Ron, R. Rubinfeld, R. E. Schapire, and L. Sellie, "Efficient Learning of Typical Finite Automata from Random Walks", in *Proceedings of the 25th Annual ACM Symposium on Theory of Computing (STOC)*, pages 315–324, 1993. (This is an extended abstract of [J5].)
- [C2] D. Ron and R. Rubinfeld, "Learning Fallible Finite State Automata", in *Proceedings of the 6th Annual Conference on Computational Learning Theory (COLT)*, pages 218–227, 1993. (This is an extended abstract of [J1].)
- [C3] D. Ron, Y, Singer, and N. Tishby, "The power of amnesia", in *Advances in Neural Information Processing Systems (NIPS)* 6, Morgan Kaufmann, pages 176–183, 1993. (This work was merged into [J3].)
- [C4] M. Kearns, Y. Mansour, D. Ron, R. Rubinfeld, R. E. Schapire, and L. Sellie, "On the learnability of discrete distributions", in *Proceedings of the 26th Annual ACM Symposium on Theory of Computing (STOC)*, pages 273–282, 1994.
- [C5] D. Ron, Y. Singer, and N. Tishby, "Learning Probabilistic Automata with Variable Memory Length", in *Proceedings of the 7th Annual Conference on Computational Learning Theory (COLT)*, pages 35–46, 1994. (This is an extended abstract of [J3].)
- [C6] I. Kremer, N. Nisan, and D. Ron, "On Randomized One-Round Communication Complexity", in *Proceedings of the 27th Annual ACM Symposium on Theory of Computing (STOC)*, pages 596–605, 1995. (This is an extended abstract of [J12].)
- [C7] D. Ron, Y. Singer, and T. Tishby, "On the Learnability and Usage of Acyclic Probabilistic Finite Automata", in *Proceedings of the 8th Annual Conference on Computational Learning Theory (COLT)*, pp 31–40, 1995. (This is an extended abstract of [J8].)
- [C8] D. Ron and R. Rubinfeld, "Exactly Learning Automata with Small Cover Time", in *Proceedings of the 8th Annual Conference on Computational Learning Theory (COLT)*, pp, 427–430, 1995. (This is an extended abstract of [J4].)
- [C9] M. J. Kearns, Y. Mansour, A. Ng, and D. Ron, "An Experimental and Theoretical Comparison of Model Selection Methods", in *Proceedings of the 8th Annual Conference on Computational Learning Theory (COLT)*, pp 21–30, 1995. (This is an extended abstract of [J7].)
- [C10] Y. Freund and D. Ron, "Learning to model sequences generated by switching distributions", in *Proceedings of the 8th Annual Conference on Computational Learning Theory (COLT)*, pp 41–50, 1995.
- [C11] Y. Freund, M. Kearns, Y. Mansour, D. Ron, R. Rubinfeld, and R. E. Schapire, "Efficient Algorithms for Learning to Play Repeated Games Against Computationally Bounded Adversaries", in *Proceedings of the 36th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 332–341, 1995.
- [C12] O. Goldreich, S. Goldwasser, and D. Ron, "Property Testing and its Connection to Learning and Approximation", in *Proceedings of the 37th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 339–348, 1996. (This is an extended abstract of [J9].)
- [C13] O. Goldreich and D. Ron, "Property Testing in Bounded Degree Graphs", in *Proceedings of the 29th Annual ACM Symposium on Theory of Computing (STOC)*, pages 406–415, 1997. (This is an extended abstract of [J18].)

- [C14] M. Kearns and D. Ron, "Algorithmic Stability and Sanity-Check Bounds for Leave-One-Out Cross-Validation", in the *Proceedings of the 10th Annual Conference on Computational Learning Theory (COLT)*, pages 152–162, 1997. (This is an extended abstract of [J10].)
- [C15] S. Decatur, O. Goldreich, and D. Ron, "Computational Sample Complexity", in the *Proceedings of the 10th Annual Conference on Computational Learning Theory (COLT)*, pages 130–142, 1997. (This is an extended abstract of [J13].)
- [C16] M. Bender, A. Fernandez, D. Ron, A. Sahai, and S. Vadhan, "The Power of a Pebble: Exploring and Mapping Directed Graphs", in *Proceedings of the 30th Annual ACM Symposium on Theory of Computing (STOC)*, pages 269–278, 1998. (This is an extended abstract of [J21].)
- [C17] O. Goldreich and D. Ron, "A Sublinear Bipartite Tester for Bounded Degree Graphs", in *Proceedings of the 30th Annual ACM Symposium on Theory of Computing (STOC)*, pages 289–298, 1998. (This is an extended abstract of [J11].)
- [C18] M. Kearns and D. Ron, "Testing Problems with Sub-Learning Sample Complexity", in *Proceedings of the 11th Annual Conference on Computational Learning Theory (COLT)*, pages 268–277, 1998. (This is an extended abstract of [J16].)
- [C19] O. Goldreich, S. Goldwasser, E. Lehman, and D. Ron, "Testing Monotonicity", in *Proceedings of the 39th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 426–435, 1998. (This is an extended abstract of [J15].)
- [C20] O. Goldreich, D. Ron, and M. Sudan, "Chinese Remaindering with Errors", in *Proceedings of the 31st Annual ACM Symposium on Theory of Computing (STOC)*, pages 225–234, 1999. (This is an extended abstract of [J14].)
- [C21] Y. Dodis, O. Goldreich, E. Lehman, S. Raskhodnikova, D. Ron, and A. Samorodnitsky. "Improved Testing Algorithms for Monotonicity", in *Proceedings of the 3rd International Workshop*¹ on Randomization and Approximation Techniques in Computer Science (RANDOM), pages 97–108, 1999.
- [C22] M. Parnas, and D. Ron, "Testing the Diameter of Graphs", in *Proceedings of the 3rd International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, pages 85–96, 1999. (This is an extended abstract of [J19].)
- [C23] M. Bender, and D. Ron, "Testing Acyclicity of Directed Graphs in Sublinear Time" in *Proceedings of the 27th International Colloquium on Automata, Languages and Programming/ (ICALP)*, pages 809–820, 2000. (This is an extended abstract of [J20].)
- [C24] N. Alon, S. Dar, M. Parnas, and D. Ron, "Testing of Clustering", in *Proceedings of the 41st Annual Symposium on Foundations of Computer Science (FOCS)*, pages 240–250, 2000. (This is an extended abstract of [J24].)
- [C25] M. Parnas, and D. Ron, "Testing Metric Properties", in *Proceedings of the 33rd Annual ACM Symposium on Theory of Computing (STOC)*, pages 276–285, 2001. (This is an extended abstract of [J26].)
- [C26] M. Parnas, D. Ron and R. Rubinfeld, "Testing Parenthesis Laguages", in *Proceedings of the 5th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, pages 261–272, 2001. (This is an extended abstract of [J23].)
- [C27] M. Parnas, D. Ron and A. Samorodnitsky, "Proclaiming Dictators and Juntas, or Testing Boolean Formulae", in *Proceedings of the 5th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, pages 273–284, 2001. (This is an extended abstract of [J22].)

¹Though the term "workshop" appears in the title, this is a (refereed) conference.

- [C28] M. Parnas, D. Ron and R. Rubinfeld, "On Testing Convexity and Submodularity", in *Proceedings of the 6th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, pages 11–25, 2002. (This is an extended abstract of [J25].)
- [C29] E. Fischer, G. Kindler, D. Ron, S. Safra, and A. Samorodnitsky, "Testing Juntas", in *Proceedings of the 43rd Annual Symposium on Foundations of Computer Science (FOCS)*, pages 103–112, 2002. (This is an extended abstract of [J28].)
- [C30] G. Even, Z. Lotker, D. Ron, and S. Smorodinsky, "Conflict-Free Colorings of Simple Geometric Regions with Applications to Frequency Assignment in Cellular Networks", in *Proceedings of the 43rd Annual Symposium on Foundations of Computer Science (FOCS)*, pages 691–700, 2002. (This is an extended abstract of [J27].)
- [C31] T. Kaufman, M. Krivelevich, and D. Ron, "Tight Bounds for Testing Bipartiteness in General Graphs", in *Proceedings of the 7th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, pages 341–353, 2003. (This is an extended abstract of [J31].)
- [C32] N. Alon, T. Kaufman, M. Krivelevich, S. Litsyn, and D. Ron, "Testing Low-Degree Polynomials over GF(2)" in *Proceedings of the 7th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM)*, pages 188–199, 2003. (This is an extended abstract of [J32].)
- [C33] N. Mishra, D. Ron, and R. Swaminathan, "On Finding Large Conjunctive Clustering", in *Proceedings of the 16th Annual Conference on Computational Learning Theory (COLT)*, 448–462, 2003. (This is an extended abstract of [J30].)
- [C34] T. Kaufman and D. Ron, "Testing Polynomials over General Fields", in *Proceedings of the 45th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 413–422, 2004. (This work is an extended abstract of [J35], and part of it is included in [J33].)
- [C35] N. Alon, T. Kaufman, M. Krivelevich and D. Ron, "Testing Triangle-Freeness in General Graphs" in *Proceedings of the 17th annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 279–288, 2006. (This work is an extended abstract of [J39].)
- [C36] O. Goldreich and D. Ron, "Approximating Average Parameters of Graphs", in *Proceedings of the 10th International Workshop on Randomization and Computation (RANDOM)*, pages 363–374, 2006. (This is an extended abstract of [J38].)
- [C37] S. Marko and D. Ron, "Distance Approximation in Bounded-Degree and General Sparse Graphs", in *Proceedings of the 10th International Workshop on Randomization and Computation (RANDOM)*, pages 475–486, 2006. (This is an extended abstract of [J43].)
- [C38] S. Raskhodnikova, D. Ron, R. Rubinfeld, and A. Smith, "Sublinear Algorithms for Approximating String Compressibility", in *Proceedings of the 11th International Workshop on Randomization and Computation (RAN-DOM)*, pages 609–623, 2007. (This is an extended abstract of [J56].)
- [C39] M. Gonen and D. Ron, "On the Benefits of Adaptivity in Property Testing of Dense Graphs", in *Proceedings of the 11th International Workshop on Randomization and Computation (RANDOM)*, pages 525–539, 2007. (This is an extended abstract of [Ja45] invited to the special issue of *Algorithmica* for RANDOM and APPROX, 2007.)
- [C40] S. Raskhodnikova, D. Ron, A. Shpilka, and A. Smith, "Strong Lower Bounds for Approximating Distribution Support Size and the Distinct Elements Problem", in *Proceedings of the 48th Annual Symposium on Foundations* of Computer Science (FOCS), pages 559–568, 2007. (This is an extended abstract of [J44].)
- [C41] M. Gonen, D. Ron, U. Weinsberg, and A. Wool, "Finding a Dense-Core in Jellyfish graphs", in *Proceedings of the 5th Workshop on Algorithms and Models for the Web-Graph (WAW)*, pages 29–40, 2007. (This is an extended abstract of [J40], also invited to the special issue of *Internet Mathematics*.)

- [C42] I. Ben-Eliezer, T. Kaufman, M. Krivelevich, and D. Ron, "Comparing the strength of query types in property testing: The case of testing *k*-colorability", in *Proceedings of the 19th annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 1213–1222, 2008. (This is an extended abstract of [J55].)
- [C43] O. Goldreich and D. Ron, "On proximity oblivious testing", in *Proceedings of the 41st Annual ACM Symposium on Theory of Computing (STOC)*, pages 141–150, 2009. (This is an extended abstract of [J49].)
- [C44] O. Goldreich and D. Ron, "Algorithmic aspects of property testing in dense graphs", in *Proceedings of the 13th international Workshop on Randomization and Computation (RANDOM)*, pages 520-533, 2009. (This is an extended abstract of [J48].)
- [C45] D. Ron and G. Tsur, "Testing Computability by Width-2 OBDDs", in *Proceedings of the 13th international Workshop on Randomization and Computation (RANDOM)*, pages 686–699, 2009. (This is an extended abstract of part of [J53].)
- [C46] M. Gonen, D. Ron, and Y. Shavitt, "Counting Stars and Other Small Subgraphs in Sublinear Time", in *Proceedings of the 21st annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 99–118, 2010. (This is an extended abstract of [J51].)
- [C47] D. Ron and G. Tsur, "Testing Computability by Width-Two OBDDs Where the Variable Order is Unknown", in *Proceedings of the 7th international Conference on Algorithms and Complexity (CIAC*, pages 131–142, 2010.
- [C48] E. Dolev and D. Ron, "Distribution-Free Testing Algorithms for Monomials with a Sublinear Number of Queries", in *Proceedings of the 14th international Workshop on Randomization and Computation (RANDOM)*, pages 531–544, 2010. (This is an extended abstract of [J50].)
- [C49] D. Ron and G. Tsur, "Testing Properties of Sparse Images", in *Proceedings of the 51st Annual Symposium on Foundations of Computer Science (FOCS)*, pages 468–477, 2010. (This is an extended abstract of [Ja60].)
- [C50] R. Levi, D. Ron, and R. Rubinfeld, "Testing Properties of Collections of Distributions", in *Proceedings of the 2nd Symposium on Innovations in Computer Science (ICS)*, pages 179–194, 2011. (This is an extended abstract of [J57].)
- [C51] D. Ron, R. Rubinfeld, M. Safra, and O. Weinsten, "Approximating the Influence of Monotone Boolean Functions in $O(\sqrt{n})$ Query Complexity", in *Proceedings of the 15th international Workshop on Randomization and Computation (RANDOM)*, pages 664–675, 2011. (This is an extended abstract of [J54].)
- [C52] D. Ron and G. Tsur, "On Approximating the Number of Relevant Variables in a Function", in *Proceedings of the 15th international Workshop on Randomization and Computation (RANDOM)*, pages 676–687, 2011. (This is an extended abstract of [J58].)
- [C53] K. Onak, D. Ron, M. Rosen, and R. Rubinfeld, "A Near-Optimal Sublinear-Time Algorithm for Approximating the Minimum Vertex Cover Size", in *Proceedings of the 23rd annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 1123–1131, 2012.
- [C54] R. Levi, D. Ron, and R. Rubinfeld, "Testing Similar Means", in *Proceedings of the 39th International Colloquium on Automata, Languages and Programming (ICALP)*, pages 629–640, 2012. (This is an extended abstract of [J61].)
- [C55] D. Ron and R. Servedio, "Exponentially improved algorithms and lower bounds for testing signed majorities", in *Proceedings of the 24th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 295–347, 2013. (This is an extended abstract of [J64].)
- [C56] A. Duta, R. Levi, D. Ron and R. Rubinfeld. "A simple online competitive adaptation of Lempel-Ziv compression with efficient random access support", in *Proceedings of the 23rd IEEE Data Compression Conference* (*DCC*), pages 113–122, 2013.

- [C57] R. Levi and D. Ron, "A Quasi-Polynomial time partition oracle for graphs with an excluded minor", in *Proceedings of the 40th International Colloquium on Automata, Languages and Programming (ICALP)*, pages 709–720, 2013. (This is an extended abstract of [J62].)
- [C58] O. Goldreich, S. Goldwasser and D. Ron, "On the possibilities and limitations of pseudodeterministic algorithms", in *Proceedings of the 4th conference on Innovations in Theoretical Computer Science (ITCS)*, pages 127–128, 2013.
- [C59] C. Canonne, D. Ron and R. Servedio. "Testing equivalence between distributions using conditional samples", in *Proceedings of the 25th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 1174–1192, 2014. (This is an extended abstract of [J63].)
- [C60] R. Levi, D. Ron, and R. Rubinfeld, "Local Algorithms for Sparse Spanning Graphs", in *Proceedings of the 18th international Workshop on Randomization and Computation (RANDOM)*, pages 826–842, 2014. (This is an extended abstract of part of [J67].)
- [C61] G. Even, M. Medina and D. Ron, "Deterministic Stateless Local Centralized Algorithms for Bounded Degree Graphs", in *Proceedings of the 22nd Annual European Symposium on Algorithms (ESA)*, pages 394–405, 2014. (This is an extended abstract of part of [J70].)
- [C62] O. Goldreich and D. Ron, "On Learning and Testing Dynamic Environments", in *Proceedings of the 55th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 336–343, 2014. (This is an extended abstract of part of [J68].)
- [C63] O. Goldreich and D. Ron, "On Sample-Based Testers", in *Proceedings of the 6th Innovations in Theoretical Computer Science Conference (ITCS)*, pages 337–345, 2015. (This is an extended abstract of part of [J66].)
- [C64] G. Even, M. Medina and D. Ron, "Distributed Maximum Matching in Bounded Degree Graphs", in *Proceedings of 16th International Conference on Distributed Computing and Networking (ICDCN)*, pages 18:1–18:10, 2015. (This is an extended abstract of part of [J70].)
- [C65] T. Eden, A. Levi, D. Ron and C. Seshadhri, "Approximately Counting Triangles in Sublinear Time", in *Proceedings of the 56th Annual Symposium on Foundations of Computer Science (FOCS)*, pages 614–633, 2015. (This is an extended abstract of part of [J69].)
- [C66] R. Levi, D. Ron, and R. Rubinfeld, "A Local Algorithm for Constructing Spanners in Minor-Free Graphs", in *Proceedings of the 20th international Workshop on Randomization and Computation (RANDOM)*, pages 38:1–38:15, 2016. (This is an extended abstract of part of [J75].)
- [C67] T. Eden, D. Ron and C. Seshadhri, "Sublinear-time Estimation of Degree Distribution Moments: The Degeneracy Connection", appeared in *Proceedings of the 44th International Colloquium on Automata, Languages and Programming (ICALP)*, pages 7:1–7:13, 2017. (This is an extended abstract of [J73].)
- [C68] T. Eden, R. Levi, and D. Ron, "Testing Bounded Arboricity", in *Proceedings of 29th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 2081–2092, 2018. (This is an extended abstract of part of [J74].)
- [C69] E. Blais, C. Canonne, T. Eden, A. Levi, and D. Ron, "Tolerant Junta Testing and the Connection to Submodular Optimization and Function Isomorphism", in *Proceedings of 29th Annual ACM-SIAM Symposium on Discrete Algorithms* (SODA), pages 2113-2132, 2018. (This is an extended abstract of [J71].)
- [C70] T. Eden, S. Jain, A. Pinar, D. Ron, and C. Seshadhri, "Provable and Practical Approximations for the Degree Distribution using Sublinear Graph Samples", in *Proceedings of the Web Conference (WWW)*, pages 449–458, 2018.

- [C71] T. Eden, D. Ron and C. Seshadhri, "On Approximating the Number of *k*-Cliques in Sublinear Time", in *Proceedings of the 50th Annual ACM Symposium on Theory of Computing (STOC)*, pages 722–734, 2018. (This is an extended abstract of part of [J76].)
- [C72] R. Levi, M. Medina and D. Ron, "Property Testing of Planarity in the CONGEST Model", in *Proceedings* of the 2018 Symposium on Principles of Distributed Computing (PODC), pages 347–356, 2018. (This is an extended abstract of [Ja77].)
- [C73] Y. Nakar and D. Ron, "On the Testability of Graph Partition Properties", in *Proceedings of the 22nd international Workshop on Randomization and Computation (RANDOM)*, pages 53:1–53:13, 2018.
- [C74] O. Goldreich and D. Ron, "The Subgraph Testing Model", in *Proceedings of the 10th Innovations in Theoretical Computer Science (ITCS) conference*, pages 37:1–37:19, 2019.
- [C75] T. Eden, D. Ron and W. Rosenbaum, "The Arboricity Captures the Complexity of Sampling Edges", in Proceedings of the 46th International Colloquium on Automata, Languages and Programming (ICALP), pages 52:1–52:14, 2019.
- [C76] T. Eden, D. Ron and C. Seshadhri, "Faster sublinear approximations of k-cliques for low arboricity graphs", in *Proceedings of the 30th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 1467—1478, 2020.
- [C77] D. Ron and A. Rosin, "Almost optimal distribution-free sample-based testing of k-modality", in *Proceedings* of the 24th international Workshop on Randomization and Computation (RANDOM), pages 27:1–17:19 2020.
- [C78] D. Ron and A. Rosin, "Optimal distribution-free sample-based testing of subsequence-freeness", in *Proceedings of the 31st Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 337–356, 2021.
- [C79] N. Fiat and D. Ron, "On distance-approximation algorithms for graph properties", in *Proceedings of 31st Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 1618–1637, 2021.
- [C80] Y. Nakar and D. Ron, "Testing dynamic environments: Back to basics", to appear in *Proceedings of the 48th International Colloquium on Automata, Languages and Programming (ICALP)*, 2021.
- [C81] Talya Eden, Saleet Mossel and D. Ron, 'Approximating the arboricity in sublinear time", to appear in *Proceedings of the 3nd Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, 2022.
- [C82] O. Goldreich and D. Ron, "Testing distributions of huge objects", to appear in *Proceedings of the 13th Innovations in Theoretical Computer Science (ITCS) conference*, 2022.