

Lev Reyzin

Mathematics, Statistics, & Computer Science
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Education

Yale University, New Haven, CT

Ph.D. (December 2009) in Computer Science

– dissertation title: “*Active Learning of Interaction Networks*”, advised by Dana Angluin

M.Phil. (December 2008) in Computer Science

M.S. (December 2006) in Computer Science

Princeton University, Princeton, NJ

B.S.E. (May 2005) in Computer Science, *cum laude*

Certificate (May 2005) in Applied and Computational Mathematics

Employment

University of Illinois at Chicago, Chicago, IL

2012–2017: Assistant Professor, Department of Mathematics, Statistics, & Computer Science;
Assistant Professor (by courtesy), Department of Computer Science

Georgia Institute of Technology, Atlanta, GA

2010–2012: Postdoctoral Fellow, ARC Center and School of Computer Science

– hosted by Santosh Vempala

Yahoo! Research, New York, NY

2009–2010: Postdoctoral Research Scientist, Machine Learning Group

– hosted by John Langford

Google, Mountain View, CA

2006 and 2007 (summers): Engineering and Research Intern, Google Research

– hosted by David 'Pablo' Cohn and Yoram Singer

Selected awards, fellowships, and grants

Grants

2015–2018 NSF Award IIS-1526379 (co-PI, with Brian Ziebart as PI, \$500,000)

“*RI: Small: Robustly Optimizing General Loss Functions with Application to Active Learning*”

2015–2016 ARO Award 66497-NS, YIP (sole PI, \$49,700)

“*Learning and Inferring Networks from Incomplete Data*”

Fellowships

2010–2012 Simons Postdoctoral Fellowship in Theoretical Computer Science

2009–2010 NSF Computing Innovation Postdoctoral Fellowship

2007–2009 NSF Graduate Research Fellowship

Awards for Work

2012 Georgia Tech’s College of Computing Outstanding Postdoctoral Research Award

2011 AISTATS Notable Paper Award

2009 Yale’s Nominee for the ACM Doctoral Dissertation Award

2007 COLT Best Student Paper Award

2006 ICML Best Student Paper Award and named one of three Outstanding Papers

Papers¹

Preprints

- [P1] Yi Huang, Mano Vikash Janardhanan, Lev Reyzin. [Network Construction with Ordered Constraints](#) On [arXiv:1702.07292](#), 2017.
- [P2] Sam Cole, Shmuel Friedland, Lev Reyzin. [A Simple Spectral Algorithm for Recovering Planted Partitions](#). On [arXiv:1503.00423](#), v3, 2016.
- [P3] Daniel Berend, Aryeh Kontorovich, Lev Reyzin. [Probably Approximate Learning under Adversarial Design](#). Manuscript, 2015.
- [P4] Jeff Cooper, Lev Reyzin. [Improved Algorithms for Distributed Boosting](#). Manuscript, 2015.
- [P5] Will Perkins, Lev Reyzin. [On the Resilience of Bipartite Networks](#). On [arXiv:1306.5720](#), 2013.

Journal publications

- [J1] Vitaly Feldman, Elena Grigorescu, Lev Reyzin, Santosh Vempala, Ying Xiao. [Statistical Algorithms and a Lower Bound for Planted Clique](#). In the *Journal of the ACM, Volume 64, Issue 2* (JACM), 2017, pp. 8:1–8:37.
- [J2] Alexander Gutfraind, Jeremy Kun, Ádám D. Lelkes, Lev Reyzin. [Network Installation under Convex Costs](#). In the *Journal of Complex Networks, Volume 4, Issue 2* (JCN), 2016, pp. 177–186.
- [J3] Dana Angluin, James Aspnes, Lev Reyzin. [Network Construction with Subgraph Connectivity Constraints](#). In the *Journal of Combinatorial Optimization, Volume 29, Issue 2* (JOCO), 2015, pp. 418–432.
- [J4] Shalev Ben-David, Lev Reyzin. [Data Stability in Clustering: A Closer Look](#). In the ALT 2012 Special Issue of *Theoretical Computer Science, Volume 558* (TCS), 2014, pp. 51–61.

¹As is customary in theoretical computer science, the author ordering on all of my published papers is alphabetical.

- [J5] Dana Angluin, James Aspnes, Lev Reyzin. [Optimally Learning Social Networks with Activations and Suppressions](#). In the ALT 2008 Special Issue of *Theoretical Computer Science, Volume 411, Issues 29–30* (TCS), 2010, pp. 2729–2740.
- [J6] Dana Angluin, James Aspnes, Jiang Chen, David Eisenstat, Lev Reyzin. [Learning Acyclic Probabilistic Circuits Using Test Paths](#). In the *Journal of Machine Learning Research, Volume 10* (JMLR), 2009, pp. 1881–1911.
- [J7] Dana Angluin, James Aspnes, Jiang Chen, Lev Reyzin. [Learning Large-Alphabet and Analog Circuits with Value Injection Queries](#). In the COLT 2007 Special Issue of *Machine Learning, Volume 72, Issues 1-2* (MLJ), 2008, pp. 113–138.
- [J8] Lev Reyzin, Nikhil Srivastava. [On the Longest Path Algorithm for Reconstructing Trees from Distance Matrices](#). In *Information Processing Letters, Volume 101, Issue 3* (IPL), 2007, pp. 98–100.

Conference Publications²

- [C1] Benjamin Fish, Lev Reyzin. [On the Complexity of Learning from Label Proportions](#). To appear in the *Proceedings of the 26th International Joint Conference on Artificial Intelligence, (IJCAI)*, 2017.
- [C2] Benjamin Fish, Yi Huang, Lev Reyzin. [Recovering Social Networks by Observing Votes](#). In the *Proceedings of the 15th International Conference on Autonomous Agents and Multiagent Systems* (AAMAS), 2016, pp. 376–384.
- [C3] Benjamin Fish, Ádám D. Lelkes, Jeremy Kun, Lev Reyzin, György Turán. [On the Computational Complexity of MapReduce](#). In the *Proceedings of the 29th International Symposium on Distributed Computing* (DISC), 2015, pp. 1–15.
- [C4] Ádám D. Lelkes, Lev Reyzin. [Interactive Clustering of Linear Classes and Cryptographic Lower Bounds](#). In the *Proceedings of the 26th International Conference on Algorithmic Learning Theory* (ALT), 2015, pp. 165–176.
- [C5] Jeremy Kun, Lev Reyzin. [Open Problem: Learning Quantum Circuits with Queries](#). In the *Proceedings of the 28th Annual Conference on Learning Theory* (COLT open problem), 2015, pp. 1767–1769.
- [C6] Yi Huang, Brian Powers, Lev Reyzin. [Training-Time Optimization of a Budgeted Booster](#). In the *Proceedings of the 24th International Joint Conference on Artificial Intelligence, (IJCAI)*, 2015, pp. 3583–3589.
- [C7] Anqi Liu, Lev Reyzin, Brian Ziebart. [Shift-Pessimistic Active Learning using Robust Bias-Aware Prediction](#). In the *Proceedings of the 29th AAAI Conference on Artificial Intelligence, (AAAI)*, 2015, pp. 2055–2061.
- [C8] Jeremy Kun, Lev Reyzin. [On Coloring Resilient Graphs](#). In the *Proceedings of the 39th Symposium on the Mathematical Foundations of Computer Science, (MFCS)*, 2014, pp. 517–528.

²Computer science conferences are rigorously refereed and constitute the **primary** venue for publication in my field. See the best practices memo by the CRA: http://www.cra.org/uploads/documents/resources/bpmemos/tenure_review.pdf for evaluating conference publications.

- [C9] Lev Reyzin. [On Boosting Sparse Parities](#). In the *Proceedings of the 28th AAAI Conference on Artificial Intelligence*, (AAAI), 2014, pp. 2055–2061.
- [C10] Jeremy Kun, Brian Powers, Lev Reyzin. [Anti-Coordination Games and Stable Graph Colorings](#). In the *Proceedings of the 6th International Symposium on Algorithmic Game Theory (SAGT)*, 2013, pp. 122–133.
- [C11] Vitaly Feldman, Elena Grigorescu, Lev Reyzin, Santosh Vempala, Ying Xiao. [Statistical Algorithms and a Lower Bound for Planted Clique](#). In the *Proceedings of the 45th ACM Symposium on the Theory of Computing (STOC)*, 2013, pp. 655–664. (41 p. on arXiv)
- [C12] Lev Reyzin. [Data Stability in Clustering: A Closer Look](#). In the *Proceedings of the 23rd International Conference on Algorithmic Learning Theory (ALT)*, 2012, pp. 184–198. Invited to a special issue of *Theoretical Computer Science*.
- [C13] Miroslav Dudik, Daniel Hsu, Satyen Kale, Nikos Karampatziakis, John Langford, Lev Reyzin, Tong Zhang. [Efficient Optimal Learning for Contextual Bandits](#). In the *Proceedings of the 27th Conference on Uncertainty in Artificial Intelligence (UAI)*, 2011, pp. 169–178. (20 p. on arXiv)
- [C14] Lev Reyzin. [Boosting on a Budget: Sampling for Feature-Efficient Prediction](#). In the *Proceedings of the 28th International Conference on Machine Learning (ICML)*, 2011, pp. 529–536.
- [C15] Elena Grigorescu, Lev Reyzin, Santosh Vempala. [On Noise-Tolerant Learning of Sparse Parities and Related Problems](#). In the *Proceedings of the 22nd International Conference on Algorithmic Learning Theory (ALT)*, 2011, pp. 413–424.
- [C16] Wei Chu, Lihong Li, Lev Reyzin, Robert E. Schapire. [Contextual Bandits with Linear Payoff Functions](#). In the *Proceedings of the 14th International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2011, pp. 208–214.
- [C17] Alina Beygelzimer, John Langford, Lihong Li, Lev Reyzin, Robert E. Schapire. [Contextual Bandit Algorithms with Supervised Learning Guarantees](#).³ In the *Proceedings of the 14th International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2011, pp. 19–26. (10 p. on arXiv)
- [C18] Satyen Kale, Lev Reyzin, Robert E. Schapire. [Non-Stochastic Bandit Slate Problems](#). In the *Proceedings of the 24th Annual Conference on Neural Information Processing Systems (NIPS)*, 2010, pp. 1045–1053. (12 p. with supplement)
- [C19] Dana Angluin, David Eisenstat, Leonid Kontorovich, Lev Reyzin. [Lower Bounds on Learning Random Structures with Statistical Queries](#). In the *Proceedings of the 21st International Conference on Algorithmic Learning Theory (ALT)*, 2010, pp. 194–208.
- [C20] Dana Angluin, James Aspnes, Lev Reyzin. [Inferring Social Networks from Outbreaks](#). In the *Proceedings of the 21st International Conference on Algorithmic Learning Theory (ALT)*, 2010, pp. 104–118.
- [C21] Dana Angluin, Leonor Becerra-Bonache, Adrian Horia Dediu, Lev Reyzin. [Learning Finite Automata Using Label Queries](#). In the *Proceedings of the 20th International Conference on Algorithmic Learning Theory (ALT)*, 2009, pp. 171–185.

³AISTATS 2011 Notable Paper.

- [C22] Dana Angluin, James Aspnes, Jiang Chen, David Eisenstat, Lev Reyzin. [Learning Acyclic Probabilistic Circuits Using Test Paths](#). In the *Proceedings of the 21st Annual Conference on Learning Theory (COLT)*, 2008, pp. 169–179.
- [C23] Dana Angluin, James Aspnes, Lev Reyzin. [Optimally Learning Social Networks with Activations and Suppressions](#). In the *Proceedings of the 19th International Conference on Algorithmic Learning Theory (ALT)*, 2008, pp. 272–286. Invited to a special issue of *Theoretical Computer Science*.
- [C24] Dana Angluin, James Aspnes, Jiang Chen, Lev Reyzin. [Learning Large-Alphabet and Analog Circuits with Value Injection Queries](#).⁴ In the *Proceedings of the 20th Annual Conference on Learning Theory (COLT)*, 2007, pp. 51–65. Invited to a special issue of *Machine Learning*.
- [C25] Lev Reyzin, Nikhil Srivastava. [Learning and Verifying Graphs Using Queries with a Focus on Edge Counting](#). In the *Proceedings of the 18th International Conference on Algorithmic Learning Theory (ALT)*, 2007, pp. 285–297.
- [C26] Lev Reyzin, Robert E. Schapire. [How Boosting the Margin Can Also Boost Classifier Complexity](#).⁵ In the *Proceedings of the 23rd International Conference on Machine Learning (ICML)*, 2006, pp. 753–760.

Selected workshop papers

- [W1] Benjamin Fish, Yi Huang, Lev Reyzin. [Recovering Social Networks by Observing Votes](#). In the *Electronic Proceedings of the 14th International Symposium on Artificial Intelligence and Mathematics (ISAIM)*, 2016, 9 p.
- [W2] Jeff Cooper, Lev Reyzin. [Improved Algorithms for Distributed Boosting](#). In the *NIPS Workshop on Distributed Machine Learning and Matrix Computations (NIPSw)*, 2014, 9 p.
- [W3] Lev Reyzin. [On Boosting Sparse Parities](#). In the *Electronic Proceedings of the 13th International Symposium on Artificial Intelligence and Mathematics (ISAIM)*, 2014, 7 p.
- [W4] Yi Huang, Brian Powers, Lev Reyzin. [Training-Time Optimization of a Budgeted Booster](#). In the *NIPS Workshop on Resource-Efficient Machine Learning (NIPSw)*, 2013, 4 p.
- [W5] Miroslav Dudik, Daniel Hsu, Satyen Kale, Nikos Karampatziakis, John Langford, Lev Reyzin, Tong Zhang. [Efficient Optimal Learning for Contextual Bandits](#). In the *ICML Workshop on Online Trading off Exploration and Exploitation 2 (ICMLw)*, 2011, 8 p.
- [W6] Alina Beygelzimer, Satyen Kale, Nikos Karampatziakis, John Langford, Lev Reyzin. [Aggressive Learning for Contextual Bandits](#). In the *Snowbird Learning Workshop (Snowbird)*, 2011, 2 p.
- [W7] Lev Reyzin. [Boosting on a Feature Budget](#). In the *ICML/COLT Workshop on Budgeted Learning (ICMLw)*, 2010, 5 p.
- [W8] Lev Reyzin. [2 Player Tetris is PSPACE Hard](#). In the *Abstracts of the 16th Annual Fall Workshop on Computational Geometry (FWCG)*, 2006, 2 p.

⁴COLT 2007 Best Student Paper.

⁵ICML 2006 Best Student Paper.

Miscellaneous

- [M1] Lev Reyzin. [A Review of *Famous Puzzles of Great Mathematicians* by Miodrag S. Petković.](#) In *SIGACT News, Volume 42, Issue 3*, September 2011, pp. 36–39.
- [M2] Dave Clarke, David Eppstein, Kaveh Ghasemloo, Lev Reyzin, András Salamon, Peter Shor, Aaron Sterling, Suresh Venkatasubramanian. [Questions Answered. In Theory.](#) In *SIGACT News, Volume 41, Issue 4*, December 2010, pp. 58–60.
- [M3] Lev Reyzin. [Lower Bounds on the VC Dimension of Unions of Concept Classes.](#) *Yale University Technical Report 1349* YALEU/DCS/TR-1349, April 2006, 12 p.

Volumes edited

- [E] Lisa Hellerstein, Lev Reyzin, György Turán (eds.), ISAIM 2014 Special Issue of *Annals of Mathematics and Artificial Intelligence, Volume 79, Issues 1–3* (AMAI), 2017, 266 p. (cf. [Forward](#), pp. 1–3.)

Dissertation

- [D] Lev Reyzin. [Active Learning of Interaction Networks.](#) *Yale University Doctoral Dissertation*, December 2009, 156 p.

Teaching

University of Illinois at Chicago, Chicago, IL

- Instructor for MCS 590: Special Topics – Foundations of Data Science (Fall 2017, Spring 2015)
- Instructor for CS/MCS 401: Computer Algorithms I (Fall 2017, Spring 2017, Fall 2016, Spring 2016)
- Instructor for MCS 548: Mathematical Theory of Artificial Intelligence (Fall 2016, Fall 2014)
- Instructor for MCS 441: Theory of Computation I (Spring 2013, Spring 2014, Spring 2016)
- Instructor for MCS 521: Combinatorial Optimization (Fall 2013)

Georgia Institute of Technology, Atlanta, GA

- Co-Instructor for CS 8803/MATH 8833: Discrete Fourier Analysis & Applications (Spring 2012)

Yale University, New Haven, CT

- Teaching Fellow for CPSC 463/563: Machine Learning (Spring 2009)
- Teaching Fellow for CPSC 365: Design & Analysis of Algorithms (Spring 2007, Spring 2008)
- Teaching Fellow for CPSC 202: Mathematical Tools for Computer Science (Fall 2006, Fall 2008)

Princeton University, Princeton, NJ

- Lab Teaching Assistant for COS 126: Introduction to Computer Science, COS 217: Introduction to Programming Systems, and COS 226: Data Structures and Algorithms (Fall 2003–Spring 2005)

Mentoring and advising

Postdoctoral mentoring

- Li Wang. RAP, UIC Mathematics, Statistics, & Computer Science, 2015 – present
 - 2016 AMS–Simons Travel Grant recipient

Ph.D. student advising

- Benjamin Fish. UIC Mathematics, Ph.D. in progress
 - 2016 NSF EAPSI fellow
- Shelby Heinecke. UIC Mathematics, Ph.D. in progress
- Yi Huang. UIC Mathematics, Ph.D. in progress
- Mano Vikash Janardhanan. UIC Mathematics, Ph.D. in progress
- Ádám D. Lelkes. UIC Mathematics, Ph.D. 2017 (co-advised with György Turán)
 - first position: Software Engineer at Google, New York, NY
 - dissertation title: “*Algorithms and Complexity Results for Learning and Big Data*”
 - 2016 Dean’s Scholar Award winner
- Jeremy Kun. UIC Mathematics, Ph.D. 2016
 - first position: Data Scientist at 21 Inc., San Francisco, CA
 - dissertation title: “*Graphs, New Models, and Complexity*”
 - 2014 Dean’s Scholar Award winner

Master’s student advising

- Samantha Davies. UIC Mathematics, M.S. 2016
 - first position: Ph.D. Mathematics student at the University of Washington

Undergraduate honors thesis supervision

- Jasmine Otto. UIC Mathematics and Computer Science, B.S. 2015
 - first position: M.S. Mathematics student at UIC

Ph.D. committee memberships or equivalent (not as advisor)

- Sam Cole. UIC Mathematics, Ph.D. in progress (advisor: Shmuel Friedland)
- Anqi Liu. UIC Computer Science, Ph.D. in progress (advisor: Brian Ziebart)
- Anooshiravan Sharabiani. UIC Industrial Engineering, Ph.D. in progress (advisor: H. Darabi)
- John Hardwick. UIC Mathematics, Ph.D. 2017 (advisor: T.E.S. Raghavan)
- Matthew Monfort. UIC Computer Science, Ph.D. 2016 (advisor: Brian Ziebart)
- Brian Powers. UIC Mathematics, Ph.D. 2016 (advisor: T.E.S. Raghavan)
- Roi Weiss. BGU Computer Science, Ph.D. 2015 (advisor: Aryeh Kontorovich)
- Xiangcheng Yu. UIC Mathematics, Ph.D. 2015 (advisor: Jan Verschelde)
- Jeffrey Cooper. UIC Mathematics, Ph.D. 2014 (advisor: Dhruv Mubayi)
- Randall Stading. UIC Mathematics, Ph.D. 2014 (advisor: Dhruv Mubayi)
- Dimitris Diochnos. UIC Mathematics, Ph.D. 2013 (advisor: György Turán)
- Habiba Habiba. UIC Computer Science, Ph.D. 2013 (advisor: Tanya Berger-Wolf)

Selected invited talks

1. Invited talk, Midwest Machine Learning Symposium, Chicago, IL, 2017
2. Mathematics colloquium, University of Illinois at Chicago, Chicago, IL, 2017
3. Invited talk, Recent Advances and Applications in ML, CCASA Conference, Chicago, IL, 2017
4. Invited talk, Information Theory and Applications, San Diego, CA, 2017
5. Invited talk, Data Science Talks, University of Illinois at Chicago, Chicago, IL, 2016
6. Invited talk, Foundations of Unsupervised Learning, Schloss Dagstuhl, Wadern, Germany, 2016
7. Invited talk, Information Theory and Applications, San Diego, CA, 2016
8. Theory seminar, Northwestern University, Evanston, IL, 2015
9. TTI-C colloquium, Toyota Technological Institute – Chicago, Chicago, IL, 2015
10. Mathematics and computer science colloquium, Emory University, Atlanta, GA, 2015
11. Computer science seminar, Georgetown University, Washington, DC, 2015
12. Invited talk, Information Theory and Applications, San Diego, CA, 2015
13. Computer science colloquium, University of Arizona, Tucson, AZ, 2014
14. Invited talk, GraphEx Symposium, Dedham, MA, 2014
15. Invited talk, Yahoo! Labs, New York, NY, 2014
16. Mathematics and computer science colloquium, Emory University, Atlanta, GA, 2014
17. Invited talk, Information Theory and Applications, San Diego, CA, 2014
18. Seminar, Microsoft Research, New York, NY, 2013
19. Invited plenary talk, Undergraduate Mathematics Symposium, Chicago, IL, 2013
20. Mathematics colloquium, University of Illinois at Chicago, Chicago, IL, 2013
21. Invited plenary talk, Chicago Area SIAM Student Conference, Chicago, IL, 2013
22. Machine learning seminar, Toyota Technological Institute – Chicago, Chicago, IL, 2013
23. Seminar, Microsoft Research, New York, NY, 2012
24. AI seminar, University of Alberta, Edmonton, Canada, 2012
25. Invited talk, Simons Postdoctoral Fellows Meeting, Stony Brook, NY, 2012
26. Tech talk, Google Research, Mountain View, CA, 2012
27. Seminar, MIT Lincoln Labs, Lexington, MA, 2012
28. Machine learning lunch talk, Carnegie Mellon University, Pittsburgh, PA, 2012

29. Computer science colloquium, College of William & Mary, Williamsburg, VA, 2012
30. Seminar, Alcatel-Lucent Bell Labs, Murray Hill, NJ, 2012
31. Mathematics colloquium, University of Illinois at Chicago, Chicago, IL, 2012
32. Seminar, Sandia National Labs, Livermore, CA, 2011
33. PRiML seminar, University of Pennsylvania, Philadelphia, PA, 2011
34. Theory seminar, Yale University, New Haven, CT, 2011
35. ARC colloquium, Georgia Institute of Technology, Atlanta, GA, 2011
36. Computer science colloquium, Ben Gurion University, Beersheba, Israel, 2010
37. ARC colloquium, Georgia Institute of Technology, Atlanta, GA, 2010
38. Seminar, Santa Fe Institute, Santa Fe, NM, 2010
39. Theory lunch talk, IBM T.J. Watson Research Center, Yorktown Heights, NY, 2010
40. Seminar, Yahoo! Research, New York, NY, 2008
41. Machine learning lunch talk, University of Massachusetts Amherst, MA, 2007
42. Machine learning symposium talk, NY Academy of Sciences, New York, NY, 2006
43. Machine learning reading group, Princeton University, Princeton, NJ, 2006

Contributed conference and workshop lectures

44. International Conference on Artificial Intelligence, Quebec City, Canada, 2014
45. International Symposium on Artificial Intelligence and Mathematics, Ft. Lauderdale, FL, 2014
46. International Conference on Algorithmic Learning Theory, Lyon, France, 2012
47. International Conference on Machine learning, Bellevue, WA, 2011
48. International Conference on Algorithmic Learning Theory, Aalto, Finland, 2011
49. International Conference on Artificial Intelligence and Statistics, Ft. Lauderdale, FL, 2011
50. Budgeted Learning Workshop at the Conference on Machine Learning, Haifa, Israel, 2010
51. International Conference on Algorithmic Learning Theory, Canberra, Australia, 2010
52. International Conference on Algorithmic Learning Theory, Porto, Portugal, 2009
53. International Conference on Learning Theory, Helsinki, Finland, 2008
54. International Conference on Algorithmic Learning Theory, Budapest, Hungary, 2008
55. International Conference on Learning Theory, San Diego, CA, 2007
56. Fall Workshop on Computational Geometry, Northampton, MA, 2006
57. International Conference on Machine Learning, Pittsburgh, PA, 2006

Professional activities

Reviewing and editorial work

– Journals

- board: associate editor of *Annals of Mathematics and Artificial Intelligence* (2016–present)
- guest editor: ISAIM 2014 special issue in *Annals of Mathematics and Artificial Intelligence*
- referee: *Journal of Machine Learning Research*, *Machine Learning Journal*, *Transactions on Neural Networks*, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *IEEE Transactions on Signal Processing*, *Artificial Intelligence Journal*, *Journal of the ACM*, *ACM Transactions on Algorithms*, *Theoretical Computer Science*, *Journal of Combinatorial Optimization*, *SIAM Journal on Discrete Mathematics*, *SIAM Journal on Computing*, *Discrete Applied Mathematics*, *Operations Research Letters*, *Optimization Letters*, *Distributed Computing*, *WIREs Computational Statistics*

– Conferences

- program committee (co-)chair: ALT 2017 (and steering committee member 2017-2018)
- program committee member (m = main / senior pc; e = extended pc / referee at-large): AAAI 2017 (e), NIPS 2016 (e), ICML 2016 (e), AISTATS 2016 (e), AAAI 2016 (e), IJCAI 2015 (e), ALT 2015 (m), ICML 2015 (e), NIPS 2014 (e), ALT 2014 (m), ICML 2014 (e), IJCAI 2013 (e), ALT 2013 (m), ICML 2013 (e), ICML 2012 (e), ALT 2012 (m), NIPS 2011 (e), ICML 2010 (e), NIPS 2010 (e)
- referee: COCOON 2017, COLT 2017, AISTATS 2017, ALT 2016, COLT 2016, STOC 2016, SODA 2016, FOCS 2015, COLT 2015, ICALP 2015, AISTATS 2015, AAAI 2015, ESA 2014, FOCS 2014, STACS 2014, MFCS 2013, ICALP 2013, ITCS 2013, SODA 2013, MFCS 2012, FOCS 2012, COLT 2012, ITCS 2012, ICML 2011, ESA 2011, COLT 2011, EC 2011, COLT 2010, ALT 2009, COLT 2009, STOC 2008

– Workshops

- organization: ISAIM 2014 “Theory of Machine Learning” special session chair
- program committee member: SIAM Network Science 2016

– Panels

- panel member: NSF, Information and Intelligent Systems (IIS), 2017
- external reviewer: DHS, Centers of Excellence (COE), 2016
- panel member: NSF, Communications and Foundations (CCF), 2015

Professional memberships

- ACM/SIGACT: professional member (2009–present), student member (2007–2009)
- AAAI: member (2014–present)
- Sigma Xi: full member (2010–present), associate member (2005–2010)
- Consortium for Modeling & Analysis of Treatments and Interventions: member (2013–present)

Service

- UIC university service: UIC faculty senate (2017–present), “program director” for purposes of evaluating Mathematics and Computer Science major student outcomes (2015–present), reviewer for Chancellor’s graduate fellowship (2012)

- UIC departmental service: faculty search committee (2016–2017), graduate mentoring award committee (2016–2017), undergraduate studies committee (2016–2017), advisory committee (2014–2016; 2015–2016 as secretary), MCS committee (2012–present; 2012–2014 responsible for redesign of undergraduate major; 2015–present as chair), salary committee (2015–2016), RAP search committee (2013–2015), MCS master’s exam coordinator (2013–2015), graduate admissions and fellowships committee (2012–2015)
- Seminar (co-)organization: UIC MCS seminar (2013–present), UIC Machine Learning seminar (2012–2013), Yale graduate student computer science theory colloquium (2007–2008)

Other

- csttheory.stackexchange.com, moderator (2014–present)