

Lev Reyzin

Mathematics, Statistics, & Computer Science (MSCS)
University of Illinois at Chicago (UIC)
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Research interests

theory and practice of machine learning, network and data science, optimization

Appointments

2017–present: Associate Professor *with tenure*, Mathematics (MSCS), University of Illinois at Chicago
2017–present: Associate Professor *by courtesy*, Computer Science, University of Illinois at Chicago
2018–2019: Visiting Associate Professor, Computer Science (EECS), Northwestern University
2012–2017: Assistant Professor, Mathematics (MSCS), University of Illinois at Chicago
2012–2017: Assistant Professor *by courtesy*, Computer Science, University of Illinois at Chicago
2010–2012: Postdoctoral Fellow (*hosted by Santosh Vempala*), ARC, Georgia Institute of Technology
2009–2010: Postdoctoral Research Scientist (*hosted by John Langford*), Yahoo! Research
2006, 2007: Summer Research Intern (*hosted by David Cohn & Yoram Singer*), Google Research
2004: Summer Technology Analyst, Goldman Sachs & Co.

Education

2009: Ph.D. in Computer Science (*advised by Dana Angluin*), Yale University
2008: M.Phil. in Computer Science, Yale University
2006: M.S. in Computer Science, Yale University
2005: B.S.E. *with honors* in Computer Science, Princeton University
2005: Certificate in Applied and Computational Mathematics, Princeton University

Grants and awards

2020–2023: NSF Award [CCF-1934915](#), \$1,500,000 (co-PI; with Tanya Berger-Wolf as PI and 3 co-PIs)
2018–2020: NSF Award [CCF-1848966](#), \$100,000 (sole PI)
2015–2018: NSF Award [IIS-1526379](#), \$500,000 (co-PI; with Brian Ziebart as PI)
2015–2016: ARO Award [66497-NS](#), \$49,700 (sole PI)
2012: Georgia Tech’s College of Computing Outstanding Postdoctoral Research Award
2011: AISTATS Notable Paper Award
2010–2012: Simons Postdoctoral Fellowship in Theoretical Computer Science
2009–2010: NSF Computing Innovation Postdoctoral Fellowship
2007: COLT Best Student Paper Award
2007–2009: NSF Graduate Research Fellowship
2006: ICML Best Student Paper Award

14. 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.
15. Dana Angluin, James Aspnes, Lev Reyzin. [Network Construction with Subgraph Connectivity Constraints](#). In the *Journal of Combinatorial Optimization*, Volume 29, Issue 2, 2015, pp. 418–432.
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.
16. Benjamin Fish, m D. Lelkes, Jeremy Kun, Lev Reyzin, Gyorgy Turan. [On the Computational Complexity of MapReduce](#). In the *Proceedings of the 29th International Symposium on Distributed Computing (DISC)*, 2015, pp. 1–15.
17. 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.
18. Jeremy Kun, Lev Reyzin. [Open Problem: Learning Quantum Circuits with Queries](#). In the *Proceedings of the 28th Annual Conference on Learning Theory (COLT)*, 2015, pp. 1767–1769.
19. Shalev Ben-David, Lev Reyzin. [Data Stability in Clustering: A Closer Look](#). In the ALT 2012 Special Issue of *Theoretical Computer Science*, Volume 558, 2014, pp. 51–61.
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*.
20. 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.
21. Lev Reyzin. [On Boosting Sparse Parities](#). In the *Proceedings of the 28th AAAI Conference on Artificial Intelligence (AAAI)*, 2014, pp. 2055–2061.
Lev Reyzin. [On Boosting Sparse Parities](#). In the *Electronic Proceedings of the 13th International Symposium on Artificial Intelligence and Mathematics (ISAIM)*, 2014, 7 p.
22. 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.
23. 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)
24. 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.
25. 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.
26. 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.
27. Alina Beygelzimer, John Langford, Lihong Li, Lev Reyzin, Robert E. Schapire. [Contextual Bandit Algorithms with Supervised Learning Guarantees](#).² In the *Proceedings of the 14th International*

²AISTATS 2011 notable paper.

- Conference on Artificial Intelligence and Statistics (AISTATS)*, 2011, pp. 19–26. (10 p. on arXiv)
28. 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.
 29. 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)
 30. 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.
 31. 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.
 32. 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, 2010, pp. 2729–2740.
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*.
 33. Lev Reyzin. [Active Learning of Interaction Networks](#). *Yale University Doctoral Dissertation*, December 2009, 156 p.
 34. 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, 2009, pp. 1881–1911.
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.
 35. Dana Angluin, Leonor Becerra-Bonache, Adrian Horia Dediú, 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.
 36. 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, 2008, pp. 113–138.
Dana Angluin, James Aspnes, Jiang Chen, Lev Reyzin. [Learning Large-Alphabet and Analog Circuits with Value Injection Queries](#).³ In the *Proceedings of the 20th Annual Conference on Learning Theory (COLT)*, 2007, pp. 51–65. Invited to a special issue of *Machine Learning*.
 37. Lev Reyzin, Nikhil Srivastava. [On the Longest Path Algorithm for Reconstructing Trees from Distance Matrices](#). In *Information Processing Letters*, Volume 101, Issue 3, 2007, pp. 98–100.
 38. 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.
 39. Lev Reyzin, Robert E. Schapire. [How Boosting the Margin Can Also Boost Classifier Complexity](#).⁴ In the *Proceedings of the 23rd International Conference on Machine Learning (ICML)*, 2006, pp. 753–760.

³COLT 2007 best student paper.

⁴ICML 2006 best student paper.

Volumes edited

1. Steve Hanneke, Lev Reyzin (eds.), Proceedings of ALT 2017 in the *Proceedings of Machine Learning Research*, Volume 76, 2017, 680 p. (cf. [Algorithmic Learning Theory: Preface](#), pp. 1–2.)
2. Lisa Hellerstein, Lev Reyzin, György Turán (eds.), ISAIM 2014 Special Issue of *Annals of Mathematics and Artificial Intelligence*, Volume 79, Issues 1–3, 2017, 266 p. (cf. [Forward](#), pp. 1–3.)

Teaching

University of Illinois at Chicago

- Instructor, ECON/STAT 473: Game Theory (Spring 2020)
- Instructor, MCS 549⁵: Mathematical Foundations of Data Science (Fall 2019, Fall 2017, Spring 2015)
- Instructor, CS/MCS 401: Computer Algorithms I (Fall 2019, Fall 2018, Fall 2017, Spring 2017, Fall 2016, Spring 2016)
- Instructor, MCS 548: Mathematical Theory of Artificial Intelligence (Fall 2018, Fall 2016, Fall 2014)
- Instructor, MCS 441: Theory of Computation I (Spring 2018, Spring 2016, Spring 2014, Spring 2013)
- Instructor, MCS 521: Combinatorial Optimization (Fall 2013)

Northwestern University

- Instructor, EECS 497-3: Advanced Topics in Computational Learning Theory (Spring 2019)
- Instructor, EECS 496-10: Computational Learning Theory (Winter 2019)

Georgia Institute of Technology

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

Yale University

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

Princeton University

- 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)

Advising and mentoring

Postdoctoral mentoring

- Li Wang (Ph.D. UCSD). Research Assistant Professor, UIC Mathematics (MSCS), 2015–2017
 - research interests: optimization, mathematical programming, tensors, large-data problems
 - first/current position: Assistant Professor of Mathematics, UT Arlington, Arlington, TX

Ph.D. student advising

- Shelby Heinecke. UIC Mathematics, Ph.D. in progress (co-advised with Tanya Berger-Wolf)
- Mano Vikash Janardhanan. UIC Mathematics, Ph.D. 2019
 - dissertation title: “*Algorithms for Learning Networks and Learning from Networks*”

⁵Taught as a special topics course under the designation MCS 590 in Fall 2017 and Spring 2016.

- first/current position: Applied Research Scientist at Lifion, New York, NY
- Benjamin Fish. UIC Mathematics, Ph.D. 2018
 - dissertation title: “*New Models and Algorithms for Data Analysis*”
 - first/current position: Postdoctoral Researcher at Microsoft Research, Montréal, Canada
- Yi Huang. UIC Mathematics, Ph.D. 2017
 - dissertation title: “*Problems in Learning under Limited Resources and Information*”
 - first/current position: Postdoctoral Scholar in Medicine at the University of Chicago, Chicago, IL
- Ádám D. Lelkes. UIC Mathematics, Ph.D. 2017 (co-advised with György Turán)
 - dissertation title: “*Algorithms and Complexity Results for Learning and Big Data*”
 - first/current position: Software Engineer at Google Research, New York, NY
- Jeremy Kun. UIC Mathematics, Ph.D. 2016
 - dissertation title: “*Graphs, New Models, and Complexity*”
 - first position: Data Scientist at 21 Inc., San Francisco, CA
 - current position: Software Engineer at Google, Mountain View, CA

Master’s student advising

- Samantha Davies. UIC Mathematics, M.S. 2016
 - continued to a Ph.D. at the University of Washington

Undergraduate honors thesis supervision

- Jasmine Otto. UIC Mathematics and Computer Science, B.S. 2015
 - continued to an M.S. at UIC (2017) and then to a Ph.D. at UC Santa Cruz
 - honors thesis title: “*Approaches to Modeling a Predator-Prey System in 2D Space*”

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

- Vignesh Ganapathiram. UIC Computer Science, Ph.D. in progress (advisor: Xinhua Zhang)
- Zhan Shi. UIC Computer Science, Ph.D. in progress (advisor: Xinhua Zhang)
- Rizal Fathony. UIC Computer Science, Ph.D. 2019 (advisor: Brian Ziebart)
- Anqi Liu. UIC Computer Science, Ph.D. 2018 (advisor: Brian Ziebart)
- Lujia Wang. UIC Mathematics, Ph.D. 2018 (advisor: Dhruv Mubayi)
- Alex Cameron. UIC Mathematics, Ph.D. 2018 (advisors: György Turán and Dhruv Mubayi)
- Sam Cole. UIC Mathematics, Ph.D. 2018 (advisor: Shmuel Friedland)
- Nathan Bliss. UIC Mathematics, Ph.D. 2018 (advisor: Jan Verschelde)
- Jeff Sommars. UIC Mathematics, Ph.D. 2018 (advisor: Jan Verschelde)
- Anooshiravan Sharabiani. UIC Industrial Engineering, Ph.D. 2017 (advisor: Houshang Darabi)
- John Hardwick. UIC Mathematics, Ph.D. 2017 (advisor: Thirukkannamangai E. S. Raghavan)
- Matthew Monfort. UIC Computer Science, Ph.D. 2016 (advisor: Brian Ziebart)
- Brian Powers. UIC Mathematics, Ph.D. 2016 (advisor: Thirukkannamangai 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)

Lectures and talks

Selected invited talks

1. Computer science seminar, Illinois Institute of Technology, Chicago, IL, 2019
2. Computer science colloquium, Northwestern University, Evanston, IL, 2019
3. Theory seminar, Purdue University, West Lafayette, IN, 2019
4. Seminar, Google Research, New York, NY, 2019
5. Conference on Statistical Learning and Data Science, Columbia University, New York, NY, 2018
6. Invited talk, Information Theory and Applications, San Diego, CA, 2018
7. Applied mathematics colloquium, Illinois Institute of Technology, Chicago, IL, 2017
8. Invited talk, Midwest Machine Learning Symposium, Chicago, IL, 2017
9. Mathematics colloquium, University of Illinois at Chicago, Chicago, IL, 2017
10. Invited talk, Recent Advances and Applications in ML, CCASA Conference, Chicago, IL, 2017
11. Invited talk, Information Theory and Applications, San Diego, CA, 2017
12. Invited talk, Data Science Talks, University of Illinois at Chicago, Chicago, IL, 2016
13. Invited talk, Foundations of Unsupervised Learning, Schloss Dagstuhl, Wadern, Germany, 2016
14. Invited talk, Information Theory and Applications, San Diego, CA, 2016
15. Theory seminar, Northwestern University, Evanston, IL, 2015
16. TTI-C colloquium, Toyota Technological Institute – Chicago, Chicago, IL, 2015
17. Mathematics and computer science colloquium, Emory University, Atlanta, GA, 2015
18. Computer science seminar, Georgetown University, Washington, DC, 2015
19. Invited talk, Information Theory and Applications, San Diego, CA, 2015
20. Computer science colloquium, University of Arizona, Tucson, AZ, 2014
21. Invited talk, GraphEx Symposium, Dedham, MA, 2014
22. Invited talk, Yahoo! Labs, New York, NY, 2014
23. Mathematics and computer science colloquium, Emory University, Atlanta, GA, 2014
24. Invited talk, Information Theory and Applications, San Diego, CA, 2014
25. Seminar, Microsoft Research, New York, NY, 2013
26. Invited plenary talk, Undergraduate Mathematics Symposium, Chicago, IL, 2013
27. Mathematics colloquium, University of Illinois at Chicago, Chicago, IL, 2013
28. Invited plenary talk, Chicago Area SIAM Student Conference, Chicago, IL 2013
29. Machine learning seminar, Toyota Technological Institute – Chicago, Chicago, IL, 2013

30. Seminar, Microsoft Research, New York, NY, 2012
 31. AI seminar, University of Alberta, Edmonton, Canada, 2012
 32. Invited talk, Simons Postdoctoral Fellows Meeting, Stony Brook, NY, 2012
 33. Tech talk, Google Research, Mountain View, CA, 2012
 34. Seminar, MIT Lincoln Labs, Lexington, MA, 2012
 35. Machine learning lunch talk, Carnegie Mellon University, Pittsburgh, PA, 2012
 36. Computer science colloquium, College of William & Mary, Williamsburg, VA, 2012
 37. Seminar, Alcatel-Lucent Bell Labs, Murray Hill, NJ, 2012
 38. Mathematics colloquium, University of Illinois at Chicago, Chicago, IL, 2012
 39. Seminar, Sandia National Labs, Livermore, CA, 2011
 40. PRiML seminar, University of Pennsylvania, Philadelphia, PA, 2011
 41. Theory seminar, Yale University, New Haven, CT, 2011
 42. ARC colloquium, Georgia Institute of Technology, Atlanta, GA, 2011
 43. Computer science colloquium, Ben Gurion University, Beersheba, Israel, 2010
 44. ARC colloquium, Georgia Institute of Technology, Atlanta, GA, 2010
 45. Seminar, Santa Fe Institute, Santa Fe, NM, 2010
 46. Theory lunch talk, IBM T.J. Watson Research Center, Yorktown Heights, NY, 2010
 47. Seminar, Yahoo! Research, New York, NY, 2008
 48. Machine learning lunch talk, University of Massachusetts Amherst, MA, 2007
 49. Machine learning symposium talk, NY Academy of Sciences, New York, NY, 2006
 50. Machine learning reading group, Princeton University, Princeton, NJ, 2006
- Contributed conference and workshop lectures
51. Allerton Conference on Communication, Control, and Computing, Monticello, IL, 2017
 52. International Conference on Artificial Intelligence, Quebec City, Canada, 2014
 53. International Symposium on Artificial Intelligence and Mathematics, Ft. Lauderdale, FL, 2014
 54. International Conference on Algorithmic Learning Theory, Lyon, France, 2012
 55. International Conference on Machine learning, Bellevue, WA, 2011
 56. International Conference on Algorithmic Learning Theory, Aalto, Finland, 2011
 57. International Conference on Artificial Intelligence and Statistics, Ft. Lauderdale, FL, 2011
 58. Budgeted Learning Workshop at the Conference on Machine Learning, Haifa, Israel, 2010
 59. International Conference on Algorithmic Learning Theory, Canberra, Australia, 2010
 60. International Conference on Algorithmic Learning Theory, Porto, Portugal, 2009
 61. International Conference on Learning Theory, Helsinki, Finland, 2008
 62. International Conference on Algorithmic Learning Theory, Budapest, Hungary, 2008
 63. International Conference on Learning Theory, San Diego, CA, 2007
 64. Fall Workshop on Computational Geometry, Northampton, MA, 2006
 65. International Conference on Machine Learning, Pittsburgh, PA, 2006

Tutorials given

66. International Conference on Algorithmic Learning Theory, Lanzarote, Spain, 2018

Panelist

67. UIC Postdoctoral Association Annual Career Development Symposium, Chicago, IL 2019

Reviewing and editorial work

Journals

- board: associate editor of *Annals of Mathematics and Artificial Intelligence* (2016–present)
- guest editor: ALT 2017 special issue in *Theoretical Computer Science*, ISAIM 2014 special issue in *Annals of Mathematics and Artificial Intelligence*
- referee: *Proceedings of the National Academy of Sciences*, *Journal of Machine Learning Research*, *Machine Learning Journal*, *Nature Machine Intelligence*, *IEEE Transactions on Neural Networks*, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *IEEE Neural Networks and Learning Systems*, *Artificial Intelligence Journal*, *Journal of the ACM*, *Journal of Computer and System Sciences*, *Algorithmica*, *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*, *Annals of Statistics*, *Journal of the American Statistical Association*, *Entropy*, *WIREs Computational Statistics*, *Applied Network Science*

Conferences

- program committee (co-)chair: ISAIM 2020, ALT 2017
- main/senior program committee member: ALT 2020, ALT 2019, RANDOM 2018, AAI 2018, ALT 2015, ALT 2014, ALT 2013, ALT 2012
- extended program committee member / reviewer-at-large: UAI 2019, AISTATS 2019, AAI 2019, NIPS 2018, AAMAS 2018, AISTATS 2018, AAI 2017, NIPS 2016, ICML 2016, AISTATS 2016, AAI 2016, IJCAI 2015, ICML 2015, NIPS 2014, ICML 2014, IJCAI 2013, ICML 2013, ICML 2012, NIPS 2011, ICML 2010, NIPS 2010
- referee: SODA 2020, SODA 2019, COLT 2018, COCOON 2017, COLT 2017, AISTATS 2017, ALT 2016, COLT 2016, STOC 2016, SODA 2016, FOCS 2015, COLT 2015, ICALP 2015, AISTATS 2015, AAI 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 2018 “Theory of Machine Learning” special session organizer and chair, ISAIM 2014 “Theory of Machine Learning” special session organizer and chair
- program committee member: SIAM Network Science 2016

Grants

- panel member: NSF, Information and Intelligent Systems (CISE), 2019
- panel member: NSF, Division of Mathematical Sciences (MPS), 2018
- panel member: NSF, Information and Intelligent Systems (CISE), 2017
- external reviewer: DHS, Centers of Excellence (S&T), 2016
- panel member: NSF, Communications and Foundations (CISE), 2015

Other

- book proposal reviewer: Cambridge University Press, 2017
- external reviewer: British Computer Society, Distinguished Dissertation Award, 2017

Service to the profession

- steering committee member of ALT, 2016–present (ex-officio 2016–2017 as PC co-chair)
- secretary and treasurer of the Association for Algorithmic Learning Theory (AALT), 2018–present
- steering committee member of ISAIM, 2014–present (ex-officio as AMAI associate editor)
- moderator of cstheory.stackexchange.com, 2014–present
- local (co-)chair of ALT, 2019

Institutional service

- UIC college/university service: honors college fellow (2019–present), faculty senate (2017–2020), committee on data sciences and social sciences (2018), LAS search committee for director of faculty research activity (2016–2017)
- UIC departmental service as chair, secretary, or equivalent: chair of the advisory committee (2019–2020), chair of the MCS faculty search committee (2017–2019), MCS program director for purposes of evaluating student outcomes (2015–2018), secretary of the advisory committee (2014–2016), responsible for redesign of MCS major (2018-2019 and 2012–2014)
- UIC departmental service: advisory committee (2019–2021, 2014–2016), tenure-track faculty search committee (2016–2020; 2017-2020 MCS search committee, 2018–2019 and 2016–2017 statistics search committee), salary committee (2019–2020, 2015–2016), graduate admissions and fellowships committee (2017–2018, 2012–2015), undergraduate studies committee (2016–2018), graduate mentoring award committee (2016–2017), research assistant professor search committee (2013–2015), MCS master’s exam coordinator (2013–2015)
- Seminar (co-)organization: UIC mathematical computer science seminar (2013–2019), UIC machine learning seminar (2012–2013), Yale graduate student computer science theory colloquium (2007–2008)

Professional memberships

- AAAI: member, 2014–present
- ACM/SIGACT: professional member, 2009–present; student member, 2007–2009
- Sigma Xi: full member, 2010–present; associate member, 2005–2010