

Elena Grigorescu

Feb 10, 2024

Education

- 2006–2010 **Ph.D.**, *Massachusetts Institute of Technology*, Cambridge, MA
Thesis: *Symmetries in Algebraic Property Testing*. Advisor: Madhu Sudan
- 2004–2006 **M.S.**, *Massachusetts Institute of Technology*, Cambridge, MA
- 2000–2004 **B.A.**, *Bard College*, Annandale, NY

Professional experience

- 2018–present **Associate Professor**, *Purdue University*, West Lafayette, IN
- 2012–2018 **Assistant Professor**, *Purdue University*, West Lafayette, IN
- 2010–2012 **Postdoctoral Fellow**, *Georgia Tech*, Atlanta, GA

Other academic positions

- Jan–April 2024 **Visiting Scientist**, *Simons Institute*, Berkeley, CA, Program: Error-correcting codes: theory and practice
- Feb–May 2020 **Visiting Faculty**, *Northeastern University*, Boston, MA
- Sep–Dec 2019 **Visiting Faculty**, *EPFL*, Lausanne, Switzerland
- Jul 2019 **Visiting Scientist**, *Simons Institute*, Berkeley, CA, Summer Cluster: Error-Correcting Codes and High-Dimensional Expansion
- 2008–2008 **Research Visitor**, *CWI*, Amsterdam, Netherlands
- 2003–2003 **Intern**, *IBM Almaden*, San Jose, CA
- 2001–2001, 2002–2002 **REU Participant**, *University of Minnesota*, Duluth, MN

Research Interests

Sublinear-time and sublinear-space algorithms; Error-correcting codes and lattices; Computational complexity; Learning theory

Publications

Journal papers - published

1. On computing Discretized Ricci curvatures of graphs: local algorithms and (localized) fine-grained reductions. B. DasGupta, E. Grigorescu, T. Mukherjee; *Theoretical Computer Science*, Theor. Comput. Sci. 975: 114127 (2023).

2. Online Directed Spanners and Steiner Forests E. Grigorescu, Y. Lin, K. Quanrud; *Theory of Computing (invited to the Special Issue for APPROX 2022)*, 2023 (to appear).
3. Limitations of Mean-Based Algorithms for Trace Reconstruction at Small Edit Distance E. Grigorescu, M. Sudan, M. Zhu *IEEE Transactions on Information Theory*, 69 (10), 6790-6801 (2022)
4. The Maximum Binary Tree Problem K. Chandrasekaran, E. Grigorescu, G. Istrate, S. Kulkarni, Y. Lin, M. Zhu: *Algorithmica* 83(8): 2427-2468 (2021)
5. Relaxed Locally Correctable Codes in Computationally Bounded Channels J. Blocki, V. Gandikota, E. Grigorescu, S. Zhou. *IEEE Trans. Inf. Theory* 67(7): 4338-4360 (2021)
6. Periodicity in Data Streams with Wildcards. F. Ergün, E. Grigorescu, E. Sadeqi Azer, S. Zhou. *Theory of Computing Systems*. 64(1): 177-197 (2020) (Invited paper)
7. Flipping out with Many Flips: Hardness of Testing k-Monotonicity. E. Grigorescu, A. Kumar, K. Wimmer. *SIAM J. Discrete Math* 33(4): 2111-2125 (2019)
8. Testing k-Monotonicity C. Cannone, E. Grigorescu, S. Guo, A. Kumar, K. Wimmer. *Theory of Computing* 15 (1) 2019
9. Nearly Optimal Sparse Group Testing. V. Gandikota, E. Grigorescu, S. Jaggi, S. Zhou. *IEEE Transactions on Information Theory*, 65(5): 2760-2773 (2019)
10. Structural Results on Matching Estimation with Applications to Streaming. M. Bury, E. Grigorescu, A. McGregor, M. Monemizadeh, C. Schwiegelshohn, S. Vorotnikova, S. Zhou. *Algorithmica* (2019) 81 (1), 367–392.
11. NP-Hardness of Reed-Solomon Decoding, and the Prouhet-Tarry-Escott Problem. V. Gandikota, B. Ghazi, E. Grigorescu. *SIAM Journal on Computing*, 47(4): 1547-1584 (2018)
12. AC₀ - MOD₂ Lower Bounds for the Boolean Inner Product Function. M. Cheraghchi, E. Grigorescu, B. Juba, K. Wimmer, N. Xie. *Journal of Computer and System Sciences*, 97: 45-59 (2018).
13. Local Testing of Lattices. K. Chandrasekaran, M. Cherachghi, V. Gandikota, E. Grigorescu. *SIAM J. Discrete Math.* 32(2): 1265-1295 (2018)
14. Statistical Algorithms and a Lower Bound for Planted Clique. V. Feldman, E. Grigorescu, L. Reyzin, S. Vempala, Y. Xiao. *Journal of the ACM*, 64(2): Article 8, 2017.
15. Deciding Orthogonality in Construction-A Lattices. K. Chandrasekaran, V. Gandikota, E. Grigorescu. *SIAM J. Discrete Math.*, 1244-1262, 2017.
16. List Decoding Barnes-Wall Lattices. E. Grigorescu, C. Peikert. *Computational Complexity*, 26(2): 365-392 (2017)
17. A Unified Framework for Testing Linear-Invariant Properties. A. Bhattacharyya, E. Grigorescu,

- A. Shapira. *Random Structures and Algorithms* 46(2): 232-260 (2015)
18. Steiner Transitive-Closure Spanners of Low-Dimensional Posets. P. Berman, A. Bhattacharyya, E. Grigorescu, S. Raskhodnikova, D. Woodruff, G. Yaroslavtsev. *Combinatorica* 34(3): 255-277 (2014)
 19. 2-Transitivity is Insufficient for Local Testability E. Grigorescu, T. Kaufman, M. Sudan. *Journal of Computational Complexity* 22(1): 137-158 (2013).
 20. Error-Correcting Data Structures. V. Chen, E. Grigorescu, R. de Wolf. *SIAM Journal on Computing* 42(1): 84-111 (2013).
 21. A Lower-Variance Randomized Algorithm for Approximate String Matching. M. J. Atallah, E. Grigorescu, Y. Wu. *Information Processing Letters*, 113(18): 690-692 (2013).
 22. Succinct Representation of Codes with Applications to Testing. E. Grigorescu, T. Kaufman, M. Sudan. *SIAM Journal on Discrete Mathematics* 26(4): 1618-1634 (2012).
 23. Transitive-Closure Spanners. A. Bhattacharyya, E. Grigorescu, K. Jung, S. Raskhodnikova, D. Woodruff. *SIAM Journal on Computing* 41(6): 1380-1425 (2012)
 24. Lower Bounds for Monotonicity Reconstruction from Transitive-Closure Spanners. A. Bhattacharyya, E. Grigorescu, M. Jha, K. Jung, S. Raskhodnikova, D. Woodruff. *SIAM Journal on Discrete Mathematics* 26(2): 618-646 (2012)
 25. Testing Odd-Cycle Freeness in Boolean Functions. A. Bhattacharyya, E. Grigorescu, P. Raghavendra, A. Shapira. *Combinatorics, Probability and Computing* 21(6): 835-855, 2012
 26. Explicit-Low Weight Bases for BCH Codes. E. Grigorescu, T. Kaufman. *IEEE Transactions of Information Theory* 58(1): 78-81, 2012.
 27. A Local Decision Test for Sparse Polynomials. E. Grigorescu, K. Jung, R. Rubinfeld. *Information Processing Letters* 110(20): 898-901, 2010.
 28. The Insulation Sequence of a Graph. E. Grigorescu. *Discrete Applied Mathematics* 134(1-3): 77-90, 2004.
 29. Decreasing the Diameter of Cycles, E. Grigorescu. *Journal of Graph Theory* 43(4): 299-303, 2003.
- [Journal papers - submitted](#)
30. Exponential Lower Bounds for Locally Decodable Codes Correcting Insertions and Deletions, J. Blocki, K. Cheng, E. Grigorescu, X. Li, Y. Zheng, M. Zhu.
 31. Hardness of Maximum Likelihood Learning of DPPs. E. Grigorescu, B. Juba, K. Wimmer, N. Xie
 32. List Learning with Attribute Noise, M. Cheraghchi, E. Grigorescu, B. Juba, K. Wimmer, N. Xie

33. Streaming Periodicity with Mismatches. F. Ergün, E. Grigorescu, S. Zhou.

Papers in refereed conferences

1. Approximation Algorithms for Directed Weighted Spanners. E. Grigorescu, N. Kumar, Y. Lin. *APPROX 2023*: 8:1-8:23
2. How to Make your Approximation Algorithm Private. J. Blocki, E. Grigorescu, T. Mukherjee, S. Zhou. *RANDOM 2023* 59:1-59:24
3. On Relaxed Locally Decodable Codes for Hamming and Insertion-Deletion Errors. A. Block, J. Blocki, K. Cheng, E. Grigorescu, X. Li, Y. Zheng, M. Zhu *Computational Complexity Conference (CCC) 2023*: 14:1-14:25.
4. Learning-Augmented Algorithms for Online Linear and Semidefinite Programming. E. Grigorescu, Y. Lin, S. Silwal, M. Song, S. Zhou *NeurIPS 2022* (Spotlight presentation.)
5. Hardness of Maximum Likelihood Learning of DPPs. E. Grigorescu, B. Juba, K. Wimmer, N. Xie. *COLT 2022*.
6. Privately Estimating Graph Parameters in Sublinear Time, J. Blocki, E. Grigorescu, and T. Mukherjee. *ICALP 2022*.
7. Exponential Lower Bounds for Locally Decodable Codes Correcting Insertions and Deletions, J. Blocki, K. Cheng, E. Grigorescu, X. Li, Y. Zheng, M. Zhu. *FOCS 2021*.
8. Online Directed Spanners and Steiner Forests E. Grigorescu, Y. Lin, K. Quanrud; *APPROX 2021 - Invited to Special Issue of Theory of Computing*.
9. List Learning with Attribute Noise, M. Cheraghchi, E. Grigorescu, B. Juba, K. Wimmer, N. Xie; *AISTATS 2021*
10. Differentially Private Sublinear-Time Clustering, J. Blocki, E. Grigorescu, and T. Mukherjee; *ISIT 2021*.
11. Limitations of Mean-Based Algorithms for Trace Reconstruction at Small Distance, E. Grigorescu, M. Sudan, M. Zhu; *ISIT 2021*
12. Locally Decodable/Correctable Codes for Insertions and Deletions, J. Blocki, A. Block, E. Grigorescu, S. Kulkarni, M. Zhu; *FSTTCS 2020*
13. Fixed-Parameter Algorithms for Longest Heapable Subsequence and Maximum Binary Tree K. Chandrasekaran, E. Grigorescu, G. Istrate, S. Kulkarni, Y. Lin, M. Zhu; *IPEC 2020*.
14. The Maximum Binary Tree Problem K. Chandrasekaran, E. Grigorescu, G. Istrate, S. Kulkarni, Y. Lin, M. Zhu. Proceedings of *European Symposium on Algorithms (ESA)*, 2020.
15. Relaxed Locally Correctable Codes in Computationally Bounded Channels. J. Blocki, V. Gandikota, E. Grigorescu, S. Zhou: *Brief Announcement: International Colloquium on Automata, Languages and Programming (ICALP, Track A) 2018*: 106:1-106:4; Proceedings

of the *IEEE International Symposium on Information Theory (ISIT) 2019*.

16. Nearly Optimal Distinct Elements and Heavy Hitters on Sliding Windows. V. Braverman, E. Grigorescu, H. Lang, D. P. Woodruff, S. Zhou: Proceedings of *International Conference on Approximation Algorithms for Combinatorial Optimization Problems* 2018: 7:1-7:22
17. Flipping out with Many Flips: Hardness of Testing k -Monotonicity. E. Grigorescu, A. Kumar, K. Wimmer: Proceedings of *International Conference on Randomization and Computation (RANDOM)* 2018: 40:1-40:17
18. Periodicity in Data Streams with Wildcards. F. Ergun, E. Grigorescu, E. Sadeqi Azer, S. Zhou: Proceedings of *Computer Science in Russia (CSR)* 2018: 90-105
19. Lattice-Based Locality Sensitive Hashing is Optimal. K. Chandrasekaran, D. Dadush, V. Gandikota, E. Grigorescu. Proceedings of *Innovations in Theoretical Computer Science (ITCS), 2018*.
20. Relaxed Locally Correctable Codes in Computationally Bounded Channels. J. Blocki, V. Gandikota, E. Grigorescu, S. Zhou: *Brief Announcement: ICALP 2018*: 106:1-106:4;
21. Communication-Efficient Distributed Learning of Discrete Distributions. I. Diakonikolas, E. Grigorescu, J. Li, A. Natarajan, K. Onak, L. Schmidt. Proceedings of *Conference on Neural Information Processing Systems (NIPS)*, 2017 (oral presentation).
22. Streaming Periodicity with Mismatches. F. Ergün, E. Grigorescu, E. Sadeqi Azer, S. Zhou. Proceeding of *the International Workshop on Randomization and Computation (RANDOM)*, 2017.
23. Streaming for Aibohphobes: Longest Palindrome with Mismatches. E. Grigorescu, E. Sadeqi Azer, S. Zhou. Proceedings of *Foundations of Software Technology and Theoretical Computer Science (FSTTCS)*, 2017.
24. Longest Alignment with Edits in Data Streams. E. Grigorescu, E. Sadeqi Azer, S. Zhou. Proceedings of *the Allerton Conference on Communication, Control and Computing*, 2017.
25. Maximally Recoverable Codes: the Bounded Case. V. Gandikota, E. Grigorescu, C. Thomas, Minshen Zhu. Proceedings of *the Allerton Conference on Communication, Control and Computing*, 2017.
26. Testing k -Monotonicity (The Rise and Fall of Boolean Functions.) C. Canonne, E. Grigorescu, S. Guo, A. Kumar, K. Wimmer. Proceedings of *Innovations in Theoretical Computer Science (ITCS)*, 2017.
27. Local Testing of Lattices. K. Chandrasekaran, M. Cherachghi, V. Gandikota, E. Grigorescu. Proceedings of *Foundations of Software Technology and Theoretical Computer Science (FSTTCS)*, 2016.
28. Nearly Optimal Sparse Group Testing. V. Gandikota, E. Grigorescu, S. Jaggi, S. Zhou.

Proceedings of *the Allerton Conference on Communication, Control and Computing*, 2016.

29. NP-Hardness of Reed-Solomon Decoding, and the Prouhet-Tarry-Escott Problem. V. Gandikota, B. Ghazi, E. Grigorescu. Proceedings of the *IEEE Symposium on Foundations of Computer Science (FOCS)*, 2016.
30. AC0-MOD2 Lower Bounds for the Boolean Inner Product Function. M. Cheraghchi, E. Grigorescu, B. Juba, K. Wimmer, N. Xie. Proceedings of *International Colloquium on Automata, Languages, and Programming (ICALP)*, Track A, 2016.
31. Deciding Orthogonality in Construction-A Lattices. K. Chandrasekaran, V. Gandikota, E. Grigorescu. Proceedings of *Foundations of Software Technology and Theoretical Computer Science (FSTTCS)* 2015.
32. On the NP-Hardness of Bounded Distance Decoding of Reed-Solomon Codes. V. Gandikota, B. Ghazi, E. Grigorescu. Proceedings of *IEEE International Symposium on Information Theory (ISIT)* 2015.
33. Tight Lower Bounds for Testing Linear Isomorphism. E. Grigorescu, K. Wimmer, N. Xie. Proceeding of *the International Workshop on Randomization and Computation (RANDOM)* 2013.
34. Statistical Algorithms and a Lower Bound for Planted Clique. V. Feldman, E. Grigorescu, L. Reyzin, S. Vempala, Y. Xiao. Proceedings of *the ACM Symposium on Theory of Computing (STOC)*, 2013.
35. List Decoding Barnes-Wall Lattices. E. Grigorescu, C. Peikert. Proceedings of *the Conference on Computational Complexity (CCC)*, 2012.
36. Testing Odd-Cycle Freeness in Boolean Functions. A. Bhattacharyya, E. Grigorescu, P. Raghavendra, A. Shapira. Proceedings of *the ACM-SIAM Symposium on Discrete Algorithms (SODA)*, 2012.
37. On Sums of Locally Testable Affine Invariant Properties. E. Ben-Sasson, E. Grigorescu, G. Maatouk, A. Shpilka, M. Sudan. Proceedings of *the International Workshop on Randomization and Computation (RANDOM)*, 2011.
38. On Noise Tolerant Learning of Sparse Parities and Related Problems. E. Grigorescu, L. Reyzin, S. Vempala. Proceedings of *the International Conference on Algorithmic Learning Theory*, 2011.
39. Steiner Transitive-Closure Spanners of Low-Dimensional Posets. P. Berman, A. Bhattacharyya, E. Grigorescu, S. Raskhodnikova, D. Woodruff, G. Yaroslavtsev. Proceedings of *the International Colloquium on Automata, Languages and Programming (ICALP, Track A)*, 2011.
40. A Unified Framework for Testing Linear Invariant Properties. A. Bhattacharyya, E. Grigorescu, A. Shapira. Proceedings of *the Symposium on Foundations of Computer Science (FOCS)*,

2010.

41. Lower Bounds for Monotonicity Reconstruction from Transitive-Closure Spanners. A. Bhattacharyya, E. Grigorescu, M. Jha, K. Jung, S. Raskhodnikova, D. Woodruff. Proceedings of *the International Workshop on Randomization and Computation (RANDOM)*, 2010.
42. Efficient and Error-Correcting Data Structures for Membership and Polynomial Evaluation. V. Chen, E. Grigorescu, R. de Wolf. Proceedings of *the Symposium on Theoretical Aspects of Computer Science (STACS)*, 2010.
43. Succinct Representation of Codes with Applications to Testing. E. Grigorescu, T. Kaufman, M. Sudan. Proceedings of *the International Workshop on Randomization and Computation (RANDOM)*, 2009.
44. Transitive-Closure Spanners. A. Bhattacharyya, E. Grigorescu, K. Jung, S. Raskhodnikova, D. Woodruff. Proceedings of *the ACM-SIAM Symposium on Discrete Algorithms (SODA)*, 2009.
45. 2-Transitivity is Insufficient for Local Testability. E. Grigorescu, T. Kaufman, M. Sudan. Proceedings of *the Conference on Computational Complexity (CCC)*, 2008.
46. Decodability of Group Homomorphisms Beyond the Johnson Bound. I. Dinur, E. Grigorescu, S. Kopparty, M. Sudan. Proceedings of *the ACM Symposium on Theory of Computing (STOC)*, 2008.
47. Local Decoding and Testing for Homomorphisms. E. Grigorescu, S. Kopparty, M. Sudan. Proceedings of *the International Workshop on Randomization and Computation (RANDOM)*, 2006.

Manuscripts

48. On k -Mer-Based and Maximum Likelihood Estimation Algorithms for Trace Reconstruction. K. Cheng, E. Grigorescu, X. Li, M. Sudan, M. Zhu. (manuscript)
49. Directed Buy-at-Bulk Spanners. E. Grigorescu, N. Kumar, Y. Lin (manuscript)
50. The Semantics of Local Characterizations for Linear-Invariant Properties. A. Bhattacharyya, E. Grigorescu, J. Nordström, N. Xie. Technical Report TR10-136, Electronic Colloquium on Computational Complexity 2010.

Student research supervising

Current:

1. Maoyuan Raymond Song; Advised: Summer 2022-present (co-advised with Paul Valiant); PhD (expected).
Current status: pre-prelim. Current support: RA
2. Nithish Kumar; Advised: Fall 2022-present; PhD (expected).
Current Status: pre-prelim. Current support: RA
3. Shreya Nasa (Spring 2023-present); MS (expected)
Masters thesis supervisor. Current support: TA

Alumnae

1. Venkata Surya Srik Gandikota. Advised: Fall 2012-Summer 2017.
Degree: PhD, 2017. Dissertation: Local and Global Computation on Algebraic Data.
Current position: Assistant Professor (tenure track) EECS Syracuse University
2. Samson Zhou (co-advised with Greg Frederickson). Advised: Fall 2012; Fall 2015-May 2018
Degree: PhD, 2018. Dissertation: Approximating Properties of Data Streams.
Current position: Assistant Professor (tenure track) CS Texas A&M.
3. Abhiram Natarajan (co-advised with Saugata Basu). Advised: Fall 2014-2020
Degree: PhD, 2020. Dissertation: Betti Numbers of Deterministic and Random Sets in Semi-Algebraic and O -minimal Geometry.
Current position: EPSRC Postdoc at the Mathematical Institute, University of Warwick.
4. Young-San Lin (co-advised with Thanh Nguyen); Advised: Fall 2014-2022
Degree: PhD. Dissertation: Online Covering: Efficient and Learning-Augmented Algorithms.
Current position: Assistant Professor (tenure-track) at Melbourne Business School.
5. Minshen Zhu; Advised: Spring 2017-2023;
Degree: PhD 2023. Disertation: Reconstruction and Local Recovery of Data from Synchronization Errors
Current position: Huawei TCS Research.
6. Tamalika Mukherjee (co-advised with Jeremiah Blocki); Advised: Spring 2020-2023
Degree: PhD 2023. Topic: Differentially Private Sublinear Algorithms
Current position: Postdoc at Columbia University.

Undergraduate student research

1. Richard Li – Spring 2021: Heapable Sequences; The Maximum Binary Tree Problem
2. Shubhang Kulkarni–Summer 2018-2019: Heapable Sequences; The Maximum Binary Tree Problem (now graduate student at UIUC)
3. Clayton Thomas– Spring 2017-Jan 2018: Maximally Recoverable Codes. Received Honorable Mention at the 2018 CRA Outstanding Undergraduate Research Awards (PhD Princeton University 2023, now postdoc at MSR New England)

Teaching

Purdue University

CS381: Introduction to the analysis of algorithms, Fall 2023, Fall 2020, Spring 2019, Spring 2018, Fall 2014.

CS584: Theory of computation/complexity theory, Fall 2023, Fall 2022, Fall 2021, Spring 2017, Spring 2014, Spring 2013.

CS483: Introduction to the theory of computation, Spring 2023, Spring 2016.

CS182: Foundations of CS, Spring 2022.

CS580: Algorithm design and analysis, Fall 2018, Fall 2017, Fall 2016, Fall 2015, Fall 2013.

CS590STA/SLA: Sublinear algorithms, Spring 2015/Spring 2021.

CS590CTT: Current topics in theoretical computer science, Fall 2012.

Georgia Tech: Discrete Fourier Analysis and Applications. Co-Instructor, Spring 2012

Funding

NSF CCF Fast and Robust Algorithms with Partial Data Access. 2022-2025.

Purdue's Ross-Lynn Fellowship (1 student) 2022-2023.

NSF AF: Small: New Efficient Algorithms for Complex Data 2019-2023.

NSF CIF: Small: Ultra-Efficient Codes for Communication and Verifiable Storage (co-PI: Blocki) 2019-2023.

NSF EAGER: Complexity of Computation on Codes and Lattices, 2016-2018.

Purdue Research Foundation grants 2015-2018 (2 students, 2 summers).

Service

Department

CS Chair Search Committee 2023-2024

Quantum Information Science Search Committee 2023-2024, 2021-2022

Graduate Study 2022-2023

Undergraduate Student Board Advisor 2020-present

Organizer of the CS Theory Seminar, 2012-2019: invited speakers, and gave talks regularly.

Graduate admissions: 2012-2015.

Theory CS hiring committee: 2018-2019.

Foundations Search 2020-2021.

CS Diversity Task Force 2020-2021.

Outreach presentations and other

- CS 197: Topics in Computer Science (Honors) 2023, 2013
- CS 397: Honors Seminar, 2013, 2015.
- CS 591: Research Seminar for Graduate students, 2014, 2015.
- Corporate Partners Program, 2012.
- CSWN events with women students and faculty, since 2012.
- Accompanied CS graduate women to Grace Hopper conference, 2013.

Professional

Journal Editor:

- Journal of Computer and Systems Sciences associate editor; Jan 2024-present.
- SICOMP editor Jan 2023-present
- Information Processing Letters editor 2019-2021; area editor 2022-present.
- SICOMP Special Issue of FOCS 2020 chair.

Conference Program Committee Member:

- European Symposium on Algorithms (ESA) 2024.
- International Symposium on Theoretical Aspects of Computer Science (STACS) 2024.
- ACM Symposium on Theory of Computing (STOC) 2023, 2015.
- Innovations in Theoretical Computer Science (ITCS) 2022, 2020
- Conference on Neural Information Processing Systems (NeurIPS) 2022, 2021, 2019.
- 23rd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC) 2023, 2022, 2021
- IEEE Symposium on Foundations of Computer Science (FOCS) 2020
- International Conference on Machine Learning (ICML) 2019.
- Computer Science in Russia (CSR), 2017, 2019.
- International Workshop on Randomization and Computation (RANDOM), 2016.
- ACM-SIAM Symposium on Discrete Algorithms (SODA), 2014.
- IEEE Conference on Computational Complexity (CCC), 2014.

Co-organizer of the Theory Fest at STOC/FCRC June 2023.

Organizer of 4, 5, 6th TCS Women/TCS for All Meeting at STOC, June 2023, 2022, 2021.

Organizer of Romanian Algorithms Days (1st edition) June 7-8 2021; (2nd edition) July 19-20, 2023.

Proposal reviewing: NSF 2023, 2020, 2018, 2015, 2014, 2013.

CRA Undergraduate Research Award Committee 2018-2020.

Organizer of the Midwest Theory Days, Purdue University, April 26-27 2019.

Organizer of the Midwest Theory Day, Purdue University, May 3rd 2014.

Other: CIFellows 2021 Kickoff Event, lead of a break-out room discussion with fellows

Honors and Awards

Graduate Student Mentoring Award, awarded by the Purdue CS Department, 2015

Computing Innovation Fellowship, awarded by CRA/NSF/CCC, 2010-2012

Akamai Presidential Fellowship, awarded by MIT, 2004-2005

Honorable Mention for the Alice T. Schafer Prize, awarded by the AWM, 2004

IBM/APS Research Internship Award, awarded by the APS, 2003

Sara Gelbart Prize in Mathematics, awarded by Bard College, 2003

Awards in Romanian National Mathematics Olympiads, 1994-2000