

CURRICULUM VITAE

for

Neeldhara Misra

Assistant Professor
Discipline of Computer Science and Engineering

Associated Dean
External Communications

Indian Institute of Technology, Gandhinagar

Personal

Date of Birth: November 25, 1987

email: neeldhara.m@iitgn.ac.in

Phone: 91- 9712- 990- 170

URL: <http://www.neeldhara.com/>

Academic Credentials

- | | |
|------|--|
| 2012 | PhD in Theoretical Computer Science
The Institute of Mathematical Sciences, Chennai |
| 2009 | MSc in Theoretical Computer Science
The Institute of Mathematical Sciences, Chennai |
| 2007 | BSc in Mathematics, Statistics and Computer Science
Mount Carmel College, Bangalore
(Recipient of the Best Student Award.) |

Professional Experience

- | | |
|---------|--|
| 2013-15 | Inspire Faculty Fellow
Indian Institute of Science, Bangalore |
| 2012-13 | Research Associate
Indian Institute of Science, Bangalore |

Publications

Books

- 2012 Neeldhara Misra. “Kernels for the F-Deletion Problem”. PhD thesis. India: Institute of Mathematical Sciences, 2012

Chapters in Books

- 2016 Neeldhara Misra. “Alternate Parameterizations”. Encyclopedia of Algorithms, 2nd Edition. 2016
- 2016 Neeldhara Misra. “Kernelization, Planar F-Deletion”. Encyclopedia of Algorithms, 2nd Edition. 2016

Expository and Review Articles

- 2012 Daniel Lokshantov, Neeldhara Misra, and Saket Saurabh. “Kernelization - Preprocessing with a Guarantee”. The Multivariate Algorithmic Revolution and Beyond. 2012, pp. 129–161
- 2011 Neeldhara Misra, Venkatesh Raman, and Saket Saurabh. “Lower bounds on kernelization”. Discrete Optimization 8.1 (2011), pp. 110–128
- 2008 Neeldhara Misra. “The Missing Boarding Pass”. Resonance 13.7 (2008), pp. 662–679

Papers in Refereed Journals

- 2020 Sandip Banerjee, Neeldhara Misra, and Subhas C. Nandy. “Color spanning objects: Algorithms and hardness results”. Discrete Applied Mathematics 280 (2020), pp. 14–22. Also appeared in the Proceedings of the Second International Conference on Algorithms and Discrete Applied Mathematics, (CALDAM) 2016
- 2019 Bireswar Das, Murali Krishna Enduri, Masashi Kiyomi, Neeldhara Misra, Yota Otachi, I. Vinod Reddy, and Shunya Yoshimura. “On structural parameterizations of firefighting”. Theoretical Computer Science 782 (2019), pp. 79–90. Also appeared in the Proceedings of the 28th International Workshop on Combinatorial Algorithms, (IWOCA), 2017.
- 2019 Palash Dey, Neeldhara Misra, and Y. Narahari. “Parameterized dichotomy of choosing committees based on approval votes in the presence of outliers”. Theoretical Com-

- puter Science 783 (2019), pp. 53–70. Also appeared in the Proceedings the International Conference on Autonomous and Multiagent Systems (AAMAS), 2017.
- 2019 Neeldhara Misra, Fahad Panolan, Ashutosh Rai, Venkatesh Raman, and Saket Saurabh. “Parameterized Algorithms for Max Colorable Induced Subgraph Problem on Perfect Graphs”. *Algorithmica* 81.1 (2019), pp. 26–46. Also appeared in the Proceedings of the 39th International Workshop on Graph-Theoretic Concepts in Computer Science (WG), 2013.
- 2018 Sandip Banerjee, Neeldhara Misra, and Subhas C. Nandy. “Color spanning objects: Algorithms and hardness results”. *Discrete Applied Mathematics* (2018). (To Appear.) Also appeared in the Proceedings of the Second International Conference on Algorithms and Discrete Applied Mathematics (CALDAM), 2016.
- 2018 Palash Dey, Neeldhara Misra, and Y. Narahari. “Complexity of manipulation with partial information in voting”. *Theor. Comput. Sci.* 726 (2018), pp. 78–99. Also appeared in the Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI), 2016.
- 2017 Serge Gaspers, Neeldhara Misra, Sebastian Ordyniak, Stefan Szeider, and Stanislav Zivny. “Backdoors into heterogeneous classes of SAT and CSP”. *J. Comput. Syst. Sci.* 85 (2017), pp. 38–56. Also appeared in the Proceedings of the Twenty-Eighth AAAI Conference on Artificial Intelligence (AAAI), 2014.
- 2017 Palash Dey, Neeldhara Misra, and Y. Narahari. “Frugal bribery in voting”. *Theor. Comput. Sci.* 676 (2017), pp. 15–32. Also appeared in the Proceedings of the Twenty-Eighth AAAI Conference on Artificial Intelligence (AAAI), 2016.
- 2016 Fedor V. Fomin, Daniel Lokshantov, Neeldhara Misra, Geevarghese Philip, and Saket Saurabh. “Hitting Forbidden Minors: Approximation and Kernelization”. *SIAM J. Discrete Math.* 30.1 (2016), pp. 383–410. Also appeared in the Proceedings of the 28th International Symposium on Theoretical Aspects of Computer Science (STACS), 2011.
- 2016 Palash Dey, Neeldhara Misra, and Y. Narahari. “Kernelization complexity of possible winner and coalitional manipulation problems in voting”. *Theor. Comput. Sci.* 616 (2016), pp. 111–125. Also appeared in the Proceedings of the 2015 International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2015.
- 2015 Pinar Heggernes, Pim van ’t Hof, Dániel Marx, Neeldhara Misra, and Yngve Villanger. “On the Parameterized Complexity of Finding Separators with Non-Hereditary Properties”. *Algorithmica* 72.3 (2015), pp. 687–713. Also appeared in the Proceedings of the 38th International Workshop on Graph-Theoretic Concepts in Computer Science (WG), 2012.

- 2014 Neeldhara Misra, Geevarghese Philip, Venkatesh Raman, and Saket Saurabh. “The Kernelization Complexity of Connected Domination in Graphs with (no) Small Cycles”. *Algorithmica* 68.2 (2014), pp. 504–530. Also appeared in the Proceedings of the Foundations of Software Technology and Theoretical Computer Science (FSTTCS), 2010
- 2013 Neeldhara Misra, N.S. Narayanaswamy, Venkatesh Raman, and Bal Sri Shankar. “Solving min ones 2-sat as fast as vertex cover”. *Theoretical Computer Science* (2013), pp. 115–121. Also appeared in the Proceedings of the Mathematical Foundations of Computer Science (MFCS), 2010
- 2013 Daniel Lokshantov, Neeldhara Misra, and Saket Saurabh. “Imbalance is fixed parameter tractable”. *Inf. Process. Lett.* 113.19–21 (2013), pp. 714–718. Also appeared in the Proceedings of the Conference on Computing and Combinatorics (COCOON), 2010
- 2013 Neeldhara Misra, Hannes Moser, Venkatesh Raman, Saket Saurabh, and Somnath Sikdar. “The Parameterized Complexity of Unique Coverage and Its Variants”. *Algorithmica* 65.3 (2013), pp. 517–544. Also appeared in the Proceedings of the Computer Science Symposium in Russia (CSR), 2009.
- 2012 Fedor V. Fomin, Daniel Lokshantov, Neeldhara Misra, Geevarghese Philip, and Saket Saurabh. “Quadratic Upper Bounds on the Erdos-Posa property for a generalization of Packing and Covering cycles” (2012), pp. 417–424
- 2012 Neeldhara Misra, Geevarghese Philip, Venkatesh Raman, and Saket Saurabh. “On Parameterized Independent Feedback Vertex Set”. *Theoretical Computer Science* (2012), pp. 65–25 (Also appeared at the Proceedings of the Conference on Computing and Combinatorics, COCOON, 2011.)
- 2012 Neeldhara Misra, Geevarghese Philip, Venkatesh Raman, Saket Saurabh, and Somnath Sikdar. “FPT algorithms for Connected Feedback Vertex Set”. *J. Comb. Optim.* 24.2 (2012), pp. 131–146 (Also appeared at the Proceedings of WALCOM: Algorithms and Computation, 2010.)
- 2009 Michael R. Fellows, Daniel Lokshantov, Neeldhara Misra, Matthias Mnich, Frances A. Rosamond, and Saket Saurabh. “The Complexity Ecology of Parameters: An Illustration Using Bounded Max Leaf Number”. *Theory of Computing Systems* 45.4 (2009), pp. 822–848. Also appeared in the Proceedings of the International Symposium on Algorithms and Computation, ISAAC, 2008.

Contributed (Non-Invited) Papers/Abstracts in Published Conference Proceedings

- 2020 Palash Dey, Neeldhara Misra, and Chinmay Sonar. “On the complexity of Winner Verification and Candidate Winner for Multiwinner Voting Rules”. *Proceedings of the*

- Twenty-Ninth International Joint Conference on Artificial Intelligence (IJCAI). 2019, To Appear
- 2020 Kishen N. Gowda, Neeldhara Misra, and Vraj Patel. “A Parameterized Perspective on Attacking and Defending Elections”. Proceedings of the 31st International Workshop on Combinatorial Algorithms (IWOCA). 2020, To Appear
- 2020 Chamanvir Kaur and Neeldhara Misra. “On the Parameterized Complexity of Spanning Trees with Small Vertex Covers”. Proceedings of the Sixth International Conference on Algorithms and Discrete Applied Mathematics (CALDAM). vol. 12016. Lecture Notes in Computer Science. Springer, 2020, pp. 427–438
- 2019 Neeldhara Misra. “On the Parameterized Complexity of Party Nominations”. Proceedings of the Sixth International Conference on Algorithmic Decision Theory (ADT). vol. 11834. Lecture Notes in Computer Science. Springer, 2019, pp. 112–125
- 2019 Pratyush Dayal and Neeldhara Misra. “Deleting to Structured Trees”. Proceedings of the Twenty-Fifth Conference on Computing and Combinatorics (COCOON). vol. 11653. Springer, 2019, pp. 128–139
- 2019 Palash Dey, Neeldhara Misra, Swaprava Nath, and Garima Shakya. “A Parameterized Perspective on Protecting Elections”. Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence (IJCAI). 2019, pp. 238–244
- 2019 Neeldhara Misra and Piyush Rathi. “The Parameterized Complexity of Dominating Set and Friends Revisited”. Computer Science Symposium in Russia, CSR. 2019
- 2019 Neeldhara Misra, Fahad Panolan, and Saket Saurabh. “On the Parameterized Complexity of Edge-Linked Paths”. Computer Science Symposium in Russia, CSR. 2019
- 2019 Neeldhara Misra and Chinmay Sonar. “Robustness Radius for Chamberlin-Courant on Restricted Domains”. Proceedings of the 45th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM). 2019, pp. 341–353
- 2019 Manoj Gupta, Hitesh Kumar, and Neeldhara Misra. “On the Complexity of Optimal Matching Reconfiguration”. Proceedings of the 45th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM). 2019, pp. 221–233
- 2018 Neeldhara Misra. “On the Parameterized Complexity of Colorful Components and Related Problems”. Proceedings of the 29th International Workshop on Combinatorial Algorithms (IWOCA). 2018, pp. 237–249
- 2018 Davide Bilò, Luciano Gualà, Stefano Leucci, and Neeldhara Misra. “On the Complexity of Two Dots for Narrow Boards and Few Colors”. Proceedings of the 9th International Conference on Fun with Algorithms (FUN). 2018, 7:1–7:15

- 2018 Bireswar Das, Murali Krishna Enduri, Neeldhara Misra, and I. Vinod Reddy. “On Structural Parameterizations of Firefighting”. Proceedings of the 4th International Conference on Algorithms and Discrete Applied Mathematics (CALDAM). 2018, pp. 221–234
- 2017 Neeldhara Misra and I. Vinod Reddy. “The Parameterized Complexity of Happy Colorings”. Proceedings of the 28th International Workshop on Combinatorial Algorithms, (IWOCA). 2017, pp. 142–153
- 2017 Neeldhara Misra, Chinmay Sonar, and P. R. Vaidyanathan. “On the Complexity of Chamberlin-Courant on Almost Structured Profiles”. Proceedings of the Fifth International Conference on Algorithmic Decision Theory (ADT). 2017, pp. 124–138
- 2017 Jayesh Choudhari, Anirban Dasgupta, Neeldhara Misra, and M. S. Ramanujan. “Saving Critical Nodes with Firefighters is FPT”. Proceedings of the 44th International Colloquium on Automata, Languages, and Programming (ICALP). 2017, 135:1–135:13
- 2017 Neeldhara Misra and Palash Dey. “On the Exact Amount of Missing Information that makes Finding Possible Winners Hard”. Proceedings of the 42nd International Symposium on Mathematical Foundations of Computer Science (MFCS). 2017, 57:1–57:14
- 2016 Neeldhara Misra. “Two Dots is NP-complete”. Proceedings of the 8th International Conference on Fun with Algorithms (FUN). 2016, 24:1–24:12
- 2016 Palash Dey and Neeldhara Misra. “Elicitation for Preferences Single Peaked on Trees”. Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI). 2016, pp. 215–221
- 2016 Palash Dey and Neeldhara Misra. “Preference Elicitation for Single Crossing Domain”. Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI). 2016, pp. 222–228
- 2016 Shivaram Kalyanakrishnan, Neeldhara Misra, and Aditya Gopalan. “Randomised Procedures for Initialising and Switching Actions in Policy Iteration”. Proceedings of the Thirtieth AAAI Conference on Artificial Intelligence (AAAI). 2016, pp. 3145–3151
- 2016 Rohit Vaish, Neeldhara Misra, Shivani Agarwal, and Avrim Blum. “On the Computational Hardness of Manipulating Pairwise Voting Rules”. Proceedings of the 2016 International Conference on Autonomous Agents & Multiagent Systems (AAMAS). 2016, pp. 358–367
- 2015 Palash Dey, Neeldhara Misra, and Y. Narahari. “Detecting Possible Manipulators in Elections”. Proceedings of the 2015 International Conference on Autonomous and Multiagent Systems (AAMAS). 2015, pp. 1441–1450

- 2015 Palash Dey, Neeldhara Misra, and Y. Narahari. “Kernelization Complexity of Possible Winner and Coalitional Manipulation Problems in Voting”. Proceedings of the 2015 International Conference on Autonomous and Multiagent Systems (AAMAS). 2015
- 2015 Neeldhara Misra, Arshed Nabeel, and Harman Singh. “On the Parameterized complexity of Minimax Approval Voting”. Proceedings of the 2015 International Conference on Autonomous and Multiagent Systems (AAMAS). 2015, pp. 97–105
- 2015 Vikram Kamat and Neeldhara Misra. “Parameterized Algorithms and Kernels for 3-Hitting Set with Parity Constraints”. Proceedings of the 9th International Conference on Algorithms and Complexity (CIAC). 2015, pp. 249–260
- 2015 Fedor V Fomin, Daniel Lokshtanov, Neeldhara Misra, M S Ramanujan, and Saket Saurabh. “Solving d-SAT via Backdoors to Small Treewidth”. Proceedings of the 26th SIAM-ACM Symposium on Discrete Algorithms (SODA). 2015, pp. 630–641
- 2014 Aniket Basu Roy, Sathish Govindarajan, Neeldhara Misra, and Shreyas Shetty. “On the d-Runaway Rectangle Escape Problem”. Proceedings of the 26th Canadian Conference on Computational Geometry (CCCG). 2014
- 2014 Akanksha Agrawal, Sathish Govindarajan, and Neeldhara Misra. “Vertex Cover Gets Faster and Harder on Low Degree Graphs”. Proceedings of the 20th Annual International Computing and Combinatorics Conference (COCOON). 2014, pp. 179–190
- 2014 Palash Dey, Prachi Goyal, and Neeldhara Misra. “UNO Gets Easier for a Single Player”. Proceedings of the 7th International Conference on Fun with Algorithms (FUN). 2014, pp. 147–157
- 2013 Prachi Goyal, Neeldhara Misra, and Fahad Panolan. “Faster Deterministic Algorithms for r -Dimensional Matching Using Representative Sets”. Proceedings of the 33rd IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS). 2013, pp. 237–248
- 2013 Daniel Lokshtanov, Neeldhara Misra, Geevarghese Philip, M. S. Ramanujan, and Saket Saurabh. “Hardness of r -Dominating Set on Graphs of Diameter $(r+1)$ ”. Proceedings of the 8th International Symposium of Parameterized and Exact Computation (IPEC). 2013, pp. 255–267
- 2013 Daniel Lokshtanov, Neeldhara Misra, and Saket Saurabh. “On the hardness of eliminating small induced subgraphs by contracting edges”. Proceedings of the 8th International Symposium of Parameterized and Exact Computation (IPEC). 2013, pp. 243–254
- 2013 Prachi Goyal, Vikram Kamat, and Neeldhara Misra. “On the Parameterized Complexity of the Maximum Edge Coloring Problem”. Proceedings of the 38th Interna-

tional Symposium on Mathematical Foundations of Computer Science (MFCS). 2013, pp. 492–503

2013 Neeldhara Misra, Fahad Panolan, and Saket Saurabh. “Subexponential Algorithm for d-Cluster Edge Deletion: Exception or Rule?” Proceedings of the 38th International Symposium on Mathematical Foundations of Computer Science (MFCS). 2013, pp. 679–690

2013 Neeldhara Misra, Sebastian Ordyniak, Venkatesh Raman, and Stefan Szeider. “Upper and Lower Bounds for Weak Backdoor Set Detection”. Proceedings of the 16th International Conference on Theory and Applications of Satisfiability Testing (SAT). 2013, pp. 394–402

2013 Ninad Rajgopal, Pradeesha Ashok, Sathish Govindarajan, Abhijit Khopkar, and Neeldhara Misra. “Hitting and Piercing Rectangles Induced by a Point Set”. Proceedings of the 19th International Conference on Computing and Combinatorics (COCON). 2013, pp. 221–232

2012 Fedor V. Fomin, Daniel Lokshtanov, Neeldhara Misra, and Saket Saurabh. “Planar F-Deletion: Approximation, Kernelization and Optimal FPT Algorithms”. Proceedings of the 53rd Annual IEEE Symposium on Foundations of Computer Science (FOCS). 2012, pp. 470–479

2011 S. Arumugam, K. Raja Chandrasekar, Neeldhara Misra, Geevarghese Philip, and Saket Saurabh. “Algorithmic Aspects of Dominator Colorings in Graphs”. Proceedings of the 22nd International Workshop on Combinatorial Algorithms (IWOCA). 2011, pp. 19–30

2010 Abhimanyu M. Ambalath, Radheshyam Balasundaram, Chintan Rao H., Venkata Koppula, Neeldhara Misra, Geevarghese Philip, and M. S. Ramanujan. “On the Kernelization Complexity of Colorful Motifs”. Proceedings of the 5th International Symposium in Parameterized and Exact Computation (IPEC). 2010, pp. 14–25

Manuscripts

2020 Neeldhara Misra and Harshil Mittal. “Imbalance Parameterized by Twin Cover Revisited”. CoRR abs/2005.03800 (2020). arXiv: 2005.03800. URL: <https://arxiv.org/abs/2005.03800>

2020 Neeldhara Misra, Harshil Mittal, and Aditi Sethia. “Red-Blue Point Separation for Points on a Circle”. CoRR abs/2005.06046 (2020). arXiv: 2005.06046. URL: <https://arxiv.org/abs/2005.06046>

2020 Neeldhara Misra and Aditi Sethia. “Fair Division is Hard Even for Amicable Agents”.

Invited Lectures

- 2019 Explorable Explanations: Interactive Essays, Winter Institute in Digital Humanities, IIT Gandhinagar
- 2019 On Stable Matchings, Keynote Talk at the ACM India Student Chapters Summit, Manipal University
- 2019 Chamberlin-Courant on Restricted Domains, Recent Trends in Algorithms, National Institute of Science Education and Research, Bhubaneswar
- 2019 Firefighting with Critical Nodes, CSA50 - Pratiksha Trust Workshop on Theoretical Computer Science, Indian Institute of Science, Bangalore
- 2019 Early Career Researcher Presentation, 13th Inter-Research-Institute Student Seminar in Computer Science, Rajagiri School of Engineering and Technology
- 2018 Technical presentation skills versus interpersonal skills, joint presentation with Varsha Apte, First ACM India Grad Cohort Workshop for Women in Computing, IIT Bombay
- 2017 An Introduction to Parameterized Algorithms, Pre-Conference Workshop on Graph Algorithms (13th ADMA Conference), SSN College
- 2017 Efficient Algorithms for Hard Problems on Structured Electorates, Invited talk at the workshop on Aspects of Computation, National University of Singapore
- 2016 Efficient Algorithms for Hard Problems on Structured Electorates, Workshop on Rangoli of Algorithms, Chennai Mathematical Institute
- 2016 Parameterized Algorithms for Computational Social Choice, Workshop on Game Theory and Optimization, Indian Institute of Science
- 2016 Elicitation for Preferences Single Peaked on Trees, CS-Econ Seminar Series, Duke University
- 2016 Parameterized Algorithms, Tutorial Talk, Duke University
- 2016 An Introduction to Computational Social Choice, Workshop on Game Theory and Optimization, Indian Institute of Science
- 2015 On the Planar F-Deletion Problem, Fourth India-Taiwan Conference on Discrete Mathematics, IIT Madras

- 2015 Glimpses of Algebraic Graph Theory and Linear Algebra Methods in Combinatorics, Workshop on Linear Algebra and Related Topics at the School of Mathematics and Computing Sciences, Rani Channamma University, Belagavi
- 2015 Some Algorithmic Excursions, Science Academies' Education Program, Workshop for Pre-University Students in Elementary Mathematics, at Christ College, Bangalore
- 2014 Parameterized Graph Modification: A Modern Perspective, New Developments in Exact Algorithms and Lower Bounds, Pre-FSTTCS Workshop, IIT Delhi
- 2014 Iterative Compression for FVS, IIIT Bangalore
- 2014 Max q -Colorable Induced Subgraph Problem on Perfect Graphs, Graph Modification Problems, Dagstuhl, Germany
- 2012 Kernels for Planar F-Deletion, Data Reduction and Problem Kernels, Dagstuhl, Germany
- 2012 Separators with Non-Hereditary Properties, Mini-Workshop on Logic, Proofs and Algorithms, VCLA
- 2012 From FVS to F-deletion: the Story of a Simple Algorithm, VCLA, Technical University of Vienna
- 2012 Kernelization, Chennai Update Meeting on Parameterized Complexity, Institute of Mathematical Sciences, Chennai
- 2012 Connected Dominating Set and Short Cycles, Indian Statistical Institute, Bangalore
- 2011 Efficient Simplification: Polynomial Time Revisited, Indian Institute of Science
- 2010 Efficient Simplification: The (im)possibilities, IMPECS School on Parameterized Complexity, Institute for Mathematical Sciences
- 2010 Expansions for Reductions, Workshop on Kernelization, Lorentz Center, Netherlands
- 2010 Connected Dominating Set and Short Cycles, Algorithms Seminar Series, University of Bergen, Norway
- 2010 Lower Bounds on Kernelization, Chalmers University, Sweden
- 2010 Iterative Compression: Try, try, till you succeed — or fail. Kalasalingam University, Madurai, and Institute Seminar Week, The Institute of Mathematical Sciences

Contributed (Non-Invited) Papers/abstracts at Workshops

- 2016 Rohit Vaish and Neeldhara Misra. “On the Parameterized Complexity of Manipulating Pairwise Voting Rules”. The 3rd Workshop on Exploring Beyond the Worst Case in Computational Social Choice. 2016
- 2013 Vikram Kamat and Neeldhara Misra. “An Erdos-Ko-Rado theorem for matchings in the complete graph”. Proceedings of the European Conference on Combinatorics, Graph Theory and Applications (Eurocomb). 2013

Program Committee Member for International Conferences

- 2021 Inter-Research-Institute Student Seminar in Computer Science (IRISS)
- 2021 Software Seminar, SOFSEM (Computational Biology Track)
- 2020 Inter-Research-Institute Student Seminar in Computer Science (PC Chair)
- 2020 ACM-India COMPUTE Conference
- 2020 Computing Symposium of Russia (CSR)
- 2020 European Conference on Artificial Intelligence (ECAI)
- 2020 International Joint Conference on Artificial Intelligence, IJCAI
- 2019 Software Seminar, SOFSEM (Computational Biology Track)
- 2019 Foundations of Software Technology and Theoretical Computer Science, FSTTCS
- 2019 International Joint Conference on Artificial Intelligence, IJCAI
- 2019 Autonomous Agents and Multiagent Systems, AAMAS
- 2019 Symposium on the Mathematical Foundations of Computer Science, MFCS
- 2018 Foundations of Software Technology and Theoretical Computer Science, FSTTCS
- 2018 International Workshop on Computational Social Choice, COMSOC
- 2018 Autonomous Agents and Multiagent Systems, AAMAS
- 2018 International Joint Conference on Artificial Intelligence, IJCAI

- 2018 International Frontiers of Algorithmics Workshop, FAW
- 2017 International Symposium of Parameterized and Exact Algorithms, IPEC)
- 2017 Autonomous Agents and Multiagent Systems, AAMAS
- 2016 Autonomous Agents and Multiagent Systems, AAMAS

Other Professional Service

- 2019 Co-Guest Editor, Algorithms (Open Access Journal)
Special Issue on “New Frontiers in Parameterized Complexity and Algorithms”.
- 2019—
Present Steering Committee Member: ACM-India Summer and Winter Schools

- 2019—
Present Member, ACM-W India Council

Grants

- 2019 Computational Aspects of Social Choice: Theory and Practice,
SERB Early Career Research Grant.
- 2018 Extremal Partial VC-Dimension and Fine-Grained Fold-Cut Problems,
SERB MATRICS Grant.
- 2012 Parameterized Methods in Bioinformatics, DST-INSPIRE Grant.

Events

- 2020 Scientific co-ordinator of the workshop Parameterized Complexity 201 at IISER Pune
- 2020 Organizer: 14th ACM-India Inter-Research-Institute Student Seminar in CS
- 2020 Organizer: ACM-India Annual Event
- 2020 Co-Organizer: ACM-W Workshop for Women in Computer Science and Research
- 2019 Coordinator: ACM-W Summer School on Algorithmic Game Theory
- 2017 Local Coordinator, GIAN Course on Pattern Matching Algorithms by Amihoud Amir

- 2017 Local Coordinator, GIAN Course on Computational Social Choice by Edith Elkind
- 2017 Co-coordinator, ACM-Summer School on Graph Theory and Graph Algorithms
- 2016 Co-Organizer, NMI Workshop on Complexity Theory
- 2016 Coordinator, TEQIP Summer School on Design and Analysis of Algorithms