Swati Gupta

Associate Professor (untenured)
Massachusetts Institute of Technology

Table of Contents

Swati Gupta
Associate Professor (untenured)
Sloan School of Management, MIT
https://swatigupta.tech
January 14, 2025

I.   Earned Degrees

Ph.D.   2017   Massachusetts Institute of Technology   *Operations Research*
Thesis: *Combinatorial Structure in Online and Convex Optimization*
Advisors: Prof. Michel X. Goemans
and Prof. Patrick Jaillet

B.Tech and M.Tech.   2011   Indian Institute of Technology Delhi   *Computer Science & Engg.*
Thesis: *Towards a 4/3-approximation for the Metric Traveling Salesman Problem*
Advisor: Prof. Naveen Garg

II.   Employment History

Sloan School of Management, MIT
Associate Professor (untenured)   *07/2024–Present*
Assistant Professor   *07/2023–06/2024*

Georgia Institute of Technology
H. Milton Stewart School of Industrial and Systems Engineering
Fouts Family Early Career Professor   *08/2020–06/2023*
School of Computer Science (by Courtesy)   *08/2020–06/2023*
Assistant Professor   *07/2018–06/2023*

Visiting Scientist, Simons Institute, UC Berkeley
Summer Cluster on Fairness   *05/2019–07/2019*

Research Fellow, Simons Institute, UC Berkeley
Real Time Decision Making   *01/2018–05/2018*
Bridging Discrete and Continuous Optimization   *08/2017–12/2017*

IBM Research Labs, Zurich
Intern Scientist   *06/2013–08/2013*

III.   Honors and Awards

- **NSF CAREER Award** for "*Advancing Equity in Selection Problems Through Bias-Aware Optimization*", 2023.

- **NSF AI Institute** on *Advances in Optimization* (as the lead for Ethical AI technical thrust, and created the 5-year strategic plan for this central thrust), 2021

- **Student Recognition of Excellence in Teaching**: Class of 1934 CIOS Honor Roll 2021, Georgia Institute of Technology

- **JP Morgan Chase Early Career Faculty Recognition**, 2021

- Multi-institution **DARPA Award** on *"Optimization for Trapped Ion Qubits"* (as Georgia Tech PI), 2020

- **Student Recognition of Excellence in Teaching**: Class of 1934 CIOS Honor Roll 2020, Georgia Institute of Technology

- **Fouts Family Early Career Professorship** in H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology, 2020-2023

- **NSF Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII) Award** for "Faster Iterative Decisions Within First-Order Optimization Methods", Algorithmic Foundations, NSF 2019

- **Simons-Berkeley Research Fellowship** for Real-Time Decision Making, subsequently selected to be funded as a **Microsoft Research Fellowship**, Spring 2018

- **Simons-Berkeley Research Fellowship** for Bridging Continuous and Discrete Optimization, Fall 2017.

- **Google India Women in Engineering Award**, 2011

Selected Finalists, Research Spotlights and Other Honors:

- **Keynote**, Lorentz Center's Workshop on Advanced Optimization for Social Choice, 2022

- Finalist in the **INFORMS 2022 Doing Good with OR** Competition (as co-author), 2022

- **Mixed Integer Programming Workshop** Student Poster Award (honorable mention, as advisor), 2022

- One of Two Georgia Tech's Institute **Nominees for Packard Fellowship**, 2021

- Finalist for **New Voices in Science, Engineering and Medicine Program 2021-2023**, an initiative of the National Academies of Sciences, Engineering and Medicine, 2021

- Best Paper Candidate in ACM Economics and Computation Conference (as co-author), 2019

- **Spotlight Paper** at Neural Information Processing Systems (NeurIPS) (as co-author), 2018

- Honorable Mention in **INFORMS Undergraduate Research Award** (as co-mentor), 2018

- Special Recognition by the **INFORMS Computing Society** (as co-author), 2016

- Finalist in **INFORMS Service Science Section Student Paper Competition** (as co-author), 2016

IV.   Research

Publications typically follow the norms of the journal/area they are published in. Standard author order is alphabetical. Some publications have student authors first, which are indicated by a †. Deviations from these two author orders are explained with footnotes.

A. Refereed Publications

A.1. Journal Articles

[1] Swati Gupta, Cyrus Hettle, Daniel Molzahn, "Fair and Reliable Reconnections for Temporary Disruptions in Electric Distribution Networks".
INFORMS Journal on Computing, *forthcoming*.
Preprint available at arXiv:2104.07631.

[2] A. Abbas, A. Ambainis, B. Augustino, A. Bärtschi, H. Buhrman, C. Coffrin, G. Cortiana, V. Dunjko, D. Egger, B. Elmegreen, N. Franco, F. Fratini, B. Fuller, J. Gacon, C. Gonciulea, S. Gribling, S. Gupta, S. Hadfield, R. Heese, G. Kircher, T. Kleinert, T. Koch, G. Korpas, S. Lenk, J. Marecek, V. Markov, G. Mazzola, S. Mensa, N. Mohseni, G. Nannicini, C. O'Meara, E. Tapia, S. Pokutta, M. Proissl, P. Rebentrost, E. Sahin, B. CB Symons, S. Tornow, V. Valls, S. Woerner, M. Wolf-Bauwens, J. Yard, S. Yarkoni, D. Zechiel, S. Zhuk, C. Zoufal, "Quantum Optimization: Potential, Challenges, and the Path Forward".
Nature Reviews Physics, 2024.
Preprint available at arXiv:2312.02279.

[3] Alessia Benevento, Swati Gupta, Massimo Pacella, Kamran Paynabar, "Sequential Sampling for Functional Estimation via SIEVE".
Quality and Reliability Engineering International, 2024.

[4] Majid Farhadi, Swati Gupta, Shengding Sun, Prasad Tetali, Michael Wigal, "Hardness and Approximations for Submodular Minimum Linear Ordering Problems".
Mathematical Programming, 2023.
Preprint available at arXiv:2108.00914.

[5] [1] Reuben Tate, Jai Moondra, Bryan Gard, Greg Mohler, Swati Gupta, "Warm-Started QAOA with Custom Mixers Provably Converges and Computationally Beats Goemans-Williamson's Max-Cut at Low Circuit Depths".
Quantum 7, 1121 2023.
Preprint available at arXiv: 2112.11354.

[6] † Jad Salem, Swati Gupta, "Secretary Problems with Biased Evaluations using Partial Ordinal Information".
Management Science, 2023.
Preliminary version appeared in *WINE 2020* as an extended abstract.
Media Coverage: *Resoundingly Human (INFORMS OR/MS Magazine), GT College of Engineering News, Diginomica*
Preprint available at ssrn: 3444283.

[7] Deven Desai, Swati Gupta, Jad Salem, "Using Algorithms to Tame Discrimination: A Path To Algorithmic Diversity, Equity and Inclusion".
UC Davis Law Review, 2023.
Preliminary version appeared in *ACM FAccT 2022* as a full paper.
Preprint available at ssrn:4244925.

[8] Swati Gupta, Akhil Jalan, Gireeja Ranade, Helen Yang, Simon Zhuang, "Too many fairness metrics: Is there a solution? Equity across Demographic Groups for the Facility Location Problem".
Fields Institute Communication Series, *forthcoming*.
Preliminary version accepted to *EDSC* 2020 (cancelled due to COVID).
Preprint available at ssrn:3554829.

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[1]Lead student author first. Lead PI last.

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[9] † Joel Rajakumar, Jai Moondra, Swati Gupta, Creston Herold, "Generating Target Graph Couplings for QAOA from Native Quantum Hardware Couplings".
Physical Review A, 106(2), p.022606, 2022.

[10] [2] Reuben Tate, Majid Farhadi, Creston Herold, Greg Mohler, Swati Gupta, "Bridging Classical and Quantum using SDP initialized warm-starts for QAOA".
ACM Transactions in Quantum Computing, 2022.
Available at doi.org/10.1145/3549554.

[11] Swati Gupta, Vijay Kamble, "Individual Fairness in Hindsight".
Journal of Machine Learning Research, 22 (144): 1-35, 2021.
Preliminary version appeared in *EC 2019* as an extended abstract.
Best Paper Candidate in EC 2019,
Spotlight Talk at NeurIPS Workshop on Ethical, Social and Governance Issues in AI, 2018.

[12] Swati Gupta, Ali Khodabakhsh, Hassan Mortagy, Evdokia Nikolova, "Electric Flows over Spanning Trees".
Mathematical Programming (Series B), Special Issue on Global Solution of Integer, Stochastic and Nonconvex Optimization Problems, 2020.

[13] Maxime Cohen, Jeremy J. Kalas, Swati Gupta, Georgia Perakis, "An Efficient Algorithm for Dynamic Pricing using a Graphical Representation".
Production and Operations Management, 2020.
INFORMS Service Science Section Student Paper Competition Finalist, 2016.

[14] Iain Dunning, Swati Gupta, John Silberholz, "What Works Best When? A Systematic Evaluation of Heuristics for Max-Cut and QUBO".
INFORMS Journal on Computing, 2018.
Notable Software: MQLib on Github, with 75 cross-disciplinary citations as of June 2023.
Finalist in Michigan Institute for Data Science's (MIDAS) Reproducibility Challenge 2020.
Special Recognition in INFORMS Computing Society Student Paper Competition, 2016.

[15] Nishita Agarwal, Naveen Garg, Swati Gupta, "A 4/3 approximation for TSP on cubic 3-edge connected graphs".
Operations Research Letters, 2018.

[16] Swati Gupta, Thulasi J. Rangan and Amitabha Tripathi, "The two-color Rado number for ax + by = (a + b)z".
Annals of Combinatorics, 2015.

A.2. Journal Papers Under Review

[17] † Jad Salem, Swati Gupta, Vijay Kamble, "Algorithmic Challenges in Ensuring Fairness at the Time of Decision".
Minor revision in **Operations Research**.
Preliminary version appeared in *WINE 2022* as an extended abstract.
Preprint available at arXiv:2103.09287.

[18] Yuri Faenza, Swati Gupta, Xuan Zhang, "Reducing the Filtering Effect in Public School Admissions: A Bias-aware Analysis for Targeted Interventions".
2nd Revision in **Manufacturing & Service Operations Management**.
Preliminary version appeared in *ACDA 2023* as an extended abstract.
Preprint available at arXiv:2004.10846.

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[2]Lead student first, lead PI last

[19] † Hassan Mortagy, Swati Gupta, Sebastian Pokutta, "Walking in the Shadow: A New Perspective on Feasible Descent Directions".
Major revision at **Mathematics of Operations Research**.
Preliminary version appeared in *NeurIPS 2021* as a full paper.
Preprint available at arXiv: 2006.08426.

[20] † Mehak Arora, Hassan Mortagy, Nathan Dwarshuis, Jeffrey Wang, Philip Yang, Swati Gupta, Andre Holder, Rishi Kamaleswaran, "Improving Clinical Decision Support through Interpretable Machine Learning and Error Correction in Electronic Health Records".
Under 3rd revision, at **Journal of the American Medical Informatics Association**, **(JAMIA)**.
Preprint available at arXiv: 2308.10781.

[21] [3] Jai Moondra, Phil Lotshaw, Greg Mohler, Swati Gupta, "Promise of Graph Sparsification and Decomposition on Noise Reduction: Analysis for Trapped-Ion Compilations for QAOA".
Revise and resubmit at **Quantum**.
Preprint available at arXiv:2406.14330.

[22] [4]Madeleine Pollack, Ryan Pianski, Swati Gupta, Alyssa Kody, Daniel Molzahn, "Equitably Allocating Wildfire Resilience Investments for Power Grids – The Curse of Aggregation and Vulnerability Indices".
Revise and resubmit at **Applied Energy**.
Preprint available at arXiv:2404.11520.

[23] Swati Gupta, Jai Moondra, Mohit Singh, "Balancing Notions of Equity: Trade-offs Between Fair Portfolio Sizes and Achievable Guarantees".
Journal version under review at **Mathematical Programming**.
Preliminary version to appear at *SODA 2025*.
Preprint available at arXiv:2311.03230.

A.3. Working Papers (intended for journals)

[24] Swati Gupta, Andrew Trapp, Marcela Vasconcellos, Yichen Yu. "Building Inclusive ML in Practice: Fairness for Intersectional Groups when Data is Noisy". Working Paper.

[25] Brandon Augustino, Madelyn Cain, Edward Farhi, Swati Gupta, Sam Gutmann, Daniel Ranard, Eugene Tang, Katherine Van Kirk, "Strategies for Running the QAOA at Hundreds of Qubits".
Preprint available at arXiv:2410.03015.

[26] Swati Gupta, Reuben Tate, "Some Challenging Instances for Max-Cut". Working Paper, 2024.

[27] Swati Gupta, Jai Moondra, Mohit Singh, "Which L_p norm is the fairest? Approximations for fair facility location across all 'p'".
Journal version in preparation.
Preliminary version appeared in *EC 2023* as an extended abstract.
Preprint available at arXiv:2211.14873.

[28] Yuri Faenza, Swati Gupta, Xuan Zhang, "Discovering Opportunities in New York City's Discovery Program: an Analysis of Affirmative Action Mechanisms".
Journal version in preparation.
Preliminary version appeared in *EC 2023* as an extended abstract.
Finalist in the INFORMS 2022 Doing Good with OR Competition.
Preprint available at arXiv:2203.00544.

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[3]Lead student author first. Lead PI last.
[4]Lead student author first, senior contributors listed alphabetically.

[29] † Jai Moondra, Hassan Mortagy, Swati Gupta, "Reusing Combinatorial Structure: Faster Iterative Projections over Submodular Base Polytopes".
Journal version in preparation.
Preliminary version appeared in *NeurIPS 2021*.
Honorable Mention for Best Poster Award, Mixed Integer Programming Workshop, 2022.
Preprint available at arXiv:2106.11943.

[30] † Cyrus Hettle, Shixiang Zhu, Swati Gupta, Yao Xie, "Balanced Redistricting for Faster Emergency Response under Imbalanced Historic Data".
Journal version in preparation.
Preliminary version appeared in *FORC 2021* as an extended abstract.
Preprint available at arXiv:2102.05028.

[31] † Zhanzhan Zhao, Cyrus Hettle[5], Swati Gupta, Jonathan Mattingly, Dana Randall, Greg Herschlag[6], "Mathematically Quantifying Gerrymandering and Non-Responsiveness of the 2021 Georgia Congressional Districting Plan".
Journal version in preparation.
Preliminary version appeared in *ACM EAAMO 2022* as a full paper.
Preprint available at 2203.06552.

[32] [7] Swati Gupta, Michel Goemans, Patrick Jaillet, "Solving Combinatorial Games using Products, Projections and Lexicographically Optimal Bases". Working paper.
Preprint available at arXiv:1603.00522.

[33] Dimitris Bertsimas, Swati Gupta, Joel Tay, "A Scalable Robust and Adaptive Optimization Approach to Inventory Routing". Working paper.
Preprint available at optimization online.

A.4. Conferences with Proceedings (Refereed)

[1] Swati Gupta, Jai Moondra, Mohit Singh, "Balancing Notions of Equity: Trade-offs Between Fair Portfolio Sizes and Achievable Guarantees". Extended abstract to appear at *ACM-SIAM Symposium on Discrete Algorithms*, **SODA 2025**.

[2] [8] William Won, Midhilesh Elavazhagan, Sudarshan Srinivasan, Ajaya Durg, Samvit Kaul, Swati Gupta, Tushar Krishna, "TACOS: Topology-Aware Collective Algorithm Synthesizer for Distributed Machine Learning", 57th *IEEE/ACM International Symposium on Microarchitecture*, **MICRO 2024**.

[3] Swati Gupta, Jai Moondra, Mohit Singh, "Which L_p norm is the fairest? Approximations for fair facility location across all 'p'. ", extended abstract appeared in *24th ACM Conference on Economics and Computation*, **EC 2023**.

[4] Yuri Faenza, Swati Gupta, Xuan Zhang, "Discovering Opportunities in New York City's Discovery Program: Disadvantaged Students in Highly Competitive Markets", extended abstract appeared in *24th ACM Conference on Economics and Computation*, **EC 2023**.

[5] Yuri Faenza, Swati Gupta, Xuan Zhang, "Reducing the Filtering Effect in Public School Admissions: A Bias-aware Analysis for Targeted Interventions", *SIAM Conference on Applied & Computational Discrete Math*, **ACDA 2023**.

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[5]Second first author
[6]Lead PI
[7]Student author first.
[8]Lead student first, lead PI last.

[6]   † Jad Salem, Swati Gupta, Vijay Kamble, "Algorithmic Challenges in Ensuring Fairness at the Time of Decision". Preprint available at arXiv:2103.09287. Extended abstract appeared in *Web and Internet Economics*, **WINE 2022**.

[7]   † Zhanzhan Zhao, Cyrus Hettle[9], Swati Gupta, Jonathan Mattingly, Dana Randall, Greg Herschlag, "Mathematically Quantifying Gerrymandering and Non-Responsiveness of the 2021 Georgia Congressional Districting Plan". Preprint available at 2203.06552. *2nd ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization* (oral presentation), **EAAMO 2022**.

[8]   † Jad Salem, Deven R. Desai, Swati Gupta, "Don't let Ricci v. DeStefano Hold You Back: A Bias-aware Legal Solution to the Hiring Paradox". Preprint available at arXiv:2201.13367. *ACM Conference on Fairness, Accountability and Transparency*, **FAccT 2022**.

[9]   † Hassan Mortagy, Jai Moondra, Swati Gupta, "Reusing Combinatorial Structure: Faster Iterative Projections over Submodular Base Polytopes", *35th Conference on Neural Information Processing Systems*, **NeurIPS 2021**. Preprint available at arXiv:2106.11943.
       Honorable Mention in Best Poster Award at Mixed Integer Programming Workshop, 2022.

[10] † Cyrus Hettle, Shixiang Zhu, Swati Gupta, Yao Xie, "Balanced Redistricting for Faster Emergency Response under Imbalanced Historic Data", (non-archival) *Foundations of Responsible Computing*, **FORC 2021**.

[11] Cyrus Hettle, Louis Faugere, Simon Kwon, Swati Gupta, and Benoit Montreuil, "Generating clusters for urban logistics in hyperconnected networks", *8th International Physical Internet Conference,* **IPIC 2021**.

[12] † Hassan Mortagy, Swati Gupta, Sebastian Pokutta, "Walking in the Shadow: A New Perspective on Descent Directions for Constrained Minimization", *34th Conference on Neural Information Processing Systems*, **NeurIPS 2020**.

[13] [10] Semih Cayci, Swati Gupta, Atilla Ermilyaz, "Group-Fair Online Allocation in Continuous Time", *34th Conference on Neural Information Processing Systems*, **NeurIPS 2020**.

[14] † Jad Salem, Swati Gupta, "Closing the Gap: Mitigating Bias in Online Resume-Filtering", extended abstract appeared in the *16th Conference on Web and Internet Economics*, **WINE 2020**.

[15] Swati Gupta, Akhil Jalan, Gireeja Ranade, Helen Yang, Simon Zhuang, "Too many fairness metrics: Is there a solution?", *Ethics of Data Science Conference*, **EDSC 2020**.

[16] Swati Gupta, Vijay Kamble, "Individual Fairness in Hindsight", extended abstract appeared in *20th ACM Conference on Economics and Computation*, **EC 2019**.
       Best Paper Candidate in EC 2019

[17] Xinbo Geng, Swati Gupta, Le Xie, "Robust Look-ahead Three-phase Balancing of Uncertain Distribution Loads", *Hawaii International Conference on System Sciences*, **HICSS 2019**.
       5th place at the ISSIP-IBM-CBA student paper award for the Best Industry Studies Paper 2019.

[18] † Song Zhou, Swati Gupta, Madeleine Udell, "Limited Memory Kelley's Method Converges for Composite Convex and Submodular Objectives", *32nd Conference on Neural Information and Processing Systems*, **NeurIPS 2018**.
       Spotlight presentation at the main conference ($\sim 3.5\%$ of total submissions),
       Honorable mention in the INFORMS UG Research Prize 2018.

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[9]Second first author
[10]Senior authors are listed by the order of seniority.

[19] Michel Goemans, Swati Gupta, Patrick Jaillet, "Newton's Method for Parametric Submodular Function Minimization", *Integer Programming and Combinatorial Optimization*, **IPCO 2017**, pp. 212-227. Springer, Cham.

[20] Swati Gupta, Kristin LeFevre, Atul Prakash, "SPAN: A Unified Framework and toolkit for Querying Heterogenous Access Policies", *Proceedings of 4th Usenix Conference on Hot Topics in Security*, 2009.

A.5. Refereed Book Chapters

[1] Book Chapter: *Temporal Notions of Algorithmic Fairness*, by Swati Gupta, Vijay Kamble, Jad Salem, Ethics in Artificial Intelligence: Bias, Fairness and Beyond (2023): 53-69, 2023.

[2] [11] Book Chapter: *Computational Comparison of Metaheuristics* by John Silberholz, Bruce Golden, Swati Gupta, Xingyin Wang, Handbook of Metaheuristics, Springer 2018.

A.6. Other Peer-Reviewed Material

[1] Swati Gupta, Jai Moondra, Mohit Singh, "Which L_p norm is the fairest? Approximations for fair facility location across all 'p'. ", *Mixed Integer Programming Workshop*, 2023.

[2] Jai Moondra, Hassan Mortagy, Swati Gupta, "Reusing Combinatorial Structure for Projections over Submodular Polytopes", *Mixed Integer Programming Workshop*, 2022.
Honorable Mention for Best Poster Award, MIP 2022.

[3] Yuri Faenza, Swati Gupta, Xuan Zhang, "Reducing the Feeder Effect in Public School Admissions: A Bias-aware Analysis for Targeted Interventions", *Manufacturing & Service Operations Management (MSOM) Conference (flash talk)*, 2022.

[4] Yuri Faenza, Swati Gupta, Xuan Zhang, "Discovering opportunities in New York City's discovery program: an analysis of affirmative action mechanisms", *Manufacturing & Service Operations Management (MSOM) Conference (flash talk)*, 2022.
Finalist in INFORMS 2022 Doing Good with OR Competition.

[5] Jad Salem, Swati Gupta, Vijay Kamble, "Taming Wild Price Fluctuations: Regret Bounds for Monotone Stochastic Convex Optimization", *Revenue Management and Pricing Conference*, 2021.

[6] Jad Salem, Swati Gupta, Vijay Kamble, "Taming Wild Price Fluctuations: Regret Bounds for Monotone Stochastic Convex Optimization", *Manufacturing and Service Operations Management (MSOM) Conference*, 2021.

[7] Jad Salem, Deven R. Desai, Swati Gupta, "Hiring Practices: Biased Data, Fairer Algorithms, and Discrimination Law", *Privacy Law Scholars Conference*, June 2021.

[8] Jad Salem, Deven R. Desai, Swati Gupta, "Hiring Practices: Biased Data, Fairer Algorithms, and Discrimination Law", *Data Law and Ethics Research Workshop*, April 2021.

[9] Swati Gupta, Akhil Jalan, Gireeja Ranade, Helen Yang, Simon Zhuang, "Too many fairness metrics: Is there a solution?", *Mechanism Design for Social Good Workshop*, 2020.

[10] Jad Salem, Swati Gupta, "Closing the Gap: Online Selections of Candidates with Biased Evaluations", *Mechanism Design for Social Good Workshop*, 2020.

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[11]Lead author first.

[11] Swati Gupta, Ali Khodabakhsh, Hassan Mortagy, Evdokia Nikolova, "Electric Flows over Spanning Trees", *Mixed Integer Programming Workshop*, 2020.

[12] Michael Wang, Swati Gupta, "Fairness in the Face of Uncertainty", *NeurIPS Workshop on Ethical, Social and Governance Issues in AI*, 2018.

[13] Swati Gupta, Vijay Kamble, "Temporal Aspects of Individual Fairness", *NeurIPS Workshop on Ethical, Social and Governance Issues in AI*, 2018.
Spotlight presentation at the workshop 2018.

[14] Swati Gupta, Michel Goemans, Patrick Jaillet, "Bregman Projections over Submodular Base Polytopes", *NeurIPS Optimization for Machine Learning Workshop*, 2016.

[15] Swati Gupta, Michel Goemans, Patrick Jaillet, "Games People (could not) Play", *Grace Hopper Conference*, October 2015.

[16] Maxime Cohen, Jeremy Kalas, Swati Gupta, Georgia Perakis, "An Efficient Algorithm for Dynamic Pricing using a Graphical Representation", *Revenue Management and Pricing Conference*, 2015.

[17] Maxime Cohen, Jeremy Kalas, Swati Gupta, Georgia Perakis, "When Dynamic Pricing Meets Graph Theory", *Manufacturing and Service Operations Management (MSOM) Conference*, 2015.

B. Media and Outreach

Media Mentions for Research

- *Can we create better algorithms for screening candidates - and reduce hiring bias?*, by Neil Raden, Diginomica, August 2019 (link)
- *Meet Your Newest Job Recruiter, the Algorithm*, by Georgia Parmelee, Georgia Tech College of Engineering News, August 2019 (Also, GT ISyE News in September 2019) (link)
- *Looking at All the Angles*, MIT's Lab of Information and Decision Systems Magazine, 2016 (link)

Media Mentions for Grants and Awards

- *Quantum, Classical Computing Combine to Tackle Tough Optimization Problems*, by John Toon, GTRI communications, April 2022 (link).
- *NSF partnerships expand National AI Research Institutes to 40 states*, NSF, July 2021 (link)
- *Swati Gupta Appointed to Fouts Family Early Career Professorship*, Georgia Tech ISyE News, August 2020 (link)
- *DARPA Awards $9.2M Grant to Inter-agency Team Researching Quantum Computing*, Georgia Tech ISyE News, June 2020 (link)

Media Mentions for Teaching and Other Activities

- *Teaching in the Time of Covid-19*, Georgia Tech College of Engineering News, November 2020. (link)
- *FPF Research Coordination Network Helps Academic Stars Connect with Private Sector Privacy Pros at IAPP*, Future of Privacy Forum, May 2019 (link)

Outreach with Podcasts

- *Keeping Bias Out of Job Applications and School Admissions*, Resoundingly Human, IN-FORMS OR/MS Magazine, June 2020 (link)
- *VOICES podcast for Social Justice Episode 5: How Do Algorithms Impact Behavior Over Time? Plus, Data Privacy, Social Media Addiction, and the Election*, Constellations Center for Equity in Computing, Georgia Tech, October 2020 (link)
- *Bias in Algorithms* with Swati Gupta, Uncommon Engineer Podcast with Georgia Tech CoE Dean Steve McLaughlin, December 2019 (link)

Other Co-authored Articles

- *CCC-INFORMS AI/OR Workshop II Report*, by John Dickerson, Bistra Dilkina, Yu Ding, Swati Gupta, Pascal Van Hentenryck, Sven Koenig, Ramayya Krishnan, Radhika Kulkarni, Catherine Gill, Haley Griffin, Maddy Hunter, and Ann Schwartz (link)
- *OR/MS Education and Quantum Computing*, by Giacomo Nannicini, Swati Gupta, Sven Leyffer, Jim Ostrowski, Luis F. Zuluaga, August 2021 (link).
- *Research Vignette: Real-Time Decision Making in Energy (RTDM-E)*, by Xinbo Geng, Swati Gupta, Tong Huang, and Le Xie, Simons Institute News Stories, April 2019 (link)

C. Presentations

C.1. Keynote Addresses and Plenary Lectures

[1] Lorentz Center's workshop on "Advanced Optimization for Social Choice", Leiden, July 2022

C.2. Selected Invited Conference and Workshop Presentations

[1] Dagstuhl Seminar 25121, Scheduling 2025

[2] Mixed Integer Programming International Workshop, Mumbai, 2024

[3] 25th International Symposium on Mathematical Programming, Montreal, 2024

[4] 26th Combinatorial Optimization Workshop, CNRS Center Paul Langevin, Aussois, January 2024 (distinguished lecture)

[5] Responsible AI Workshop, at Columbia Business School, September 2023

[6] Introduction to Algorithms Fairness and Equity, Simons Laufer Mathematical Sciences Institute, Berkeley, August 2023

[7] Summer School Lectures on Optimization, at Gene Golub SIAM Summer School, August 2023

[8] Invited Featured Talk, Gender Inclusion Workshop (GIW) at EC, July 2023

[9] The Jon-Shmuel Halfway to Twelfty Workshop, July 2023

[10] Panelist, "Implications of Data and Algorithms", Symposium on Social and Ethical Responsibilities of Computing, MIT, April 2023

[11] ICERM's workshop on Combinatorics and Optimization, Rutgers April 2023

[12] Los Alamos National Lab Grid Science Winter School and Conference, January 2023

[13] Simons Institute Workshop on Data-Driven Decision Making, November 2022

[14] Discrete Optimization Talks (Online DOT Seminars), April 2022

[15] NSF-FET Workshop on Ising Machines, Frontiers in Emerging Technologies within NSF's CISE (Computer and Information Science and Engineering) Directorate, April 2022

[16] NSF Tripods-X Workshop on ML & Supply Chain Management, Lehigh University, Dec 2021

[17] Theory of Computing for Fairness, a Simons Collaboration Project, December 2021

[18] IEEE Quantum Week 2021 Workshop, October 2021

[19] Auctions and Market Design Cluster, INFORMS Annual Meeting, November 2021

[20] ML for Industry Forum 2021, Lawrence Livermore National Laboratory, August 2021

[21] Crossing Disciplines: Studying Fairness, Bias, and Inequality in Management and Decision Sciences Research, at Harvard Business School, May 2021

[22] Georgia Tech Library's Symposium on the Interaction of Privacy and Autonomy, August 2020

[23] Classification Society Annual Meeting, San Diego, July 2020 (COVID postponement)

[24] INFORMS Optimization Society Conference, Greenville, Mar 2020 (COVID cancellation)

[25] AI for Public Health Workshop, Center for Disease Control, Mar 2020 (COVID postponement)

[26] Information Theory and Applications Workshop, San Diego, Feb 2020

[27] Optimization for ML Workshop, Vancouver, Dec 2019

[28] Conference on Optimization, Fields Institute, Toronto, November 2019

[29] Conference on Data Science and Optimization, Fields Institute, Toronto, November 2019

[30] Optimization in Power Systems, Power & Energy Systems Annual Meeting, August 2019

[31] Mixed Integer Programming Workshop (MIP) 2019, MIT, July 2019

[32] AMS Sectional Meeting, University of Hawaii at Manoa, March 2019

[33] Information Theory and Applications Workshop, UC San Diego, February 2019

[34] Workshop on Mathematical and Computational Challenges in Real-time Decision Making, Simons Institute, UC Berkeley, May 2018

[35] Workshop on Algorithms and Optimization, International Centre for Theoretical Sciences (ICTS), Bangalore, January 2018

C.3. Selected Invited Seminar Presentations

[1] IIM Mumbai, September 2024

[2] Women in Data Science and Mathematics (WINDSMATH) Seminar Series, March 2024

[3] Rice University, March 2024

[4] NYU Stern School of Business, February 2024

[5] Princeton University, November 2023

[6] Texas A&M University, January 2023

[7] National Institute of Industrial Engineering (NITIE), Mumbai (online), India, November 2022

[8] University of California at Berkeley, October 2022

[9] Responsible AI at LinkedIn, Data Tech Talks (online), May 2022

[10] University of British Columbia, Sauder School of Business (online), March 2022

[11] Indian Institute of Science - MSR India Joint Theory Seminar (online), March 2022

[12] MIT Sloan School of Management (online), February 2022

[13] Georgia Tech Research Institute, February 2022

[14] Department of ISE (online), Lehigh University, April 2021

[15] Department of Industrial and Systems Engineering, Virginia Tech (online), March 2021

[16] Institute of Operations Research & Analytics, National University of Singapore, March 2021

[17] Algorithms and Randomness Center, Georgia Tech, February 2021

[18]   MIT Operations Research Center, IAP Seminar on Policymaking in OR (online), January 2021

[19]   Amazon Research, Seattle (online), January 2021

[20]   Guest Lecture in Virginia Tech Course (online), December 2020

[21]   IBM Research Zurich (online), November 2020

[22]   LIONS Seminar, Arizona State University (online), October 2020

[23]   Oracle Research Group (online), October 2020

[24]   Zillow Group (online), August 2020

[25]   Center for Operations Research and Econometrics (CORE), Belgium, February, 2019

[26]   Stanford Theory Seminar, Stanford University, April 2018

[27]   Google Research, Mountain View, February 2018

[28]   Visa Research, November 2017

[29]   Tepper School of Business, CMU, February 2017

[30]   UCLA Anderson School of Management, February 2017

[31]   Cornell University, ORIE, February 2017

[32]   Yale School of Management, February 2017

[33]   Booth School of Business, Chicago, January 2017

[34]   School of Industrial and Systems Engineering, Georgia Tech, January 2017

[35]   Northwestern University, IEMS, January 2017

[36]   Google Research, NYC 2016

[37]   Database Lab (CSE), Boston University, March 2016

C.4.   Outreach to Law Professionals and Policy Makers

[1]   Invited Panelist for **Trustworthy AI: Practical Roadmap for the Government**, organized by Snorkel AI, April 2022
Other panelists included representatives from Linkedin, FBI, Department of Navy, BNY Mellon, Snorkel.

[2]   **Discovering Opportunities in New York City's Discovery Program**, Department of Education in New York, 2022
Jointly with Yuri Faenza and Xuan Zhang, on the incentive-misalignment in the discovery program.

[3]   Invited featured academic speaker at **IAPP Global Privacy Summit**, April 2022
Jointly with Brenda Leong (Former Future of Privacy Forum) and Kat Robinson (NIKE), we conducted a 4-hour workshop on *AI for Privacy Professionals*, featuring bias in hiring.

[4]   Invited featured academic speaker invited by the Future of Privacy Forum to present at the "Little Big Stage", **International Association of Privacy Professionals (IAPP)**, Washington DC, May 2, 2019.

[5]   Invited Panelist, **Profiling, micro-targeting and a right to reasonable algorithmic inferences**, organized by Microsoft at the International Conference on Computers, Privacy, and Data Protection, in Brussels, January 30 - Feb 1, 2019.

[6]   Invited Tutorial on **Bias and Fairness in ML/AI**, in collaboration with the Future of Privacy Forum, at the official side-event at the International Conference of Data Protection (ICDPPC), 2018 and the first lecture in the *Digital Data Flows Masterclass* lecture series organized by the Future of Privacy Forum.

C.5. Selected K-12 and Diversity, Inclusion and Equity Outreach Activities

[1] Guest Lecture to selected faculty from HBCUs and MSIs as a part of the teacher training program at the NSF AI Institute, June 2022

[2] Invited Talks to high schoolers at the Tapia Summer Camps, Tapia Center for Excellence and Equity in Education, Rice University, Texas, June 2021.

[3] Invited Seminar to upper-class level students at the Mount Vernon School, Sandy Springs, Georgia, September 2020.

[4] Invited Lecture[12] to 5th graders at the Peeples Elementary School, Fayette County, Georgia, October 2019.

[5] Seminar to 2nd graders at the Midvale Elementary School, Dekalb County, Atlanta Science Festival, March 2019

[6] Seminar at the Mission Possible Summer Camp, Georgia Tech, June 2018

[7] Instructor, Beginners I-II Sections, Class 5-6, module on "Growth and Decay of Exponentials", *Berkeley Math Circle, UC Berkeley*, a weekly Mathematics program for over 500 San Francisco Bay Area elementary, middle and high school students, January 2018

[8] "Power of Exponential", *BLOSSOMS educational video*, created with Nataly Youssef and John Silberholz. This video has been dubbed in Urdu and Mandarin. It is a part of the Florida High School Math Curriculum (CPALMS: resource 28034)

D. Grants

- **MIT SERC Seed Grant** for *Towards Equitable and Efficient Organ Transplantation through Longer Preservation Times*, Agency: Social and Ethical Responsibilities of Computing, MIT. Overall funding: $50K, Role: Principal Investigator, Collaborators: Mehmet Toner (MGH), Korkut Uygun (MGH), Heidi Yeh (MGH). Duration: August 2024 - July 2025.

- **NSF CAREER Award** for *Advancing Equity in Selection Problems Through Bias-Aware Optimization*, Agency: National Science Foundation, Overall funding: $\sim$ $530K, Role: Principal Investigator, Collaborators: none, Duration: July 2023 - June 2028, Candidate's Share: $\sim$ $531K.

- **NSF AI Institute on Advances in Optimization (AI4OPT)**, Agency: National Science Foundation, Overall funding: $\sim$ $20 million, Role: Lead of the Ethical AI Technical Thrust, Collaborator(s): Pascal Van Hentenryck (PI), Justin Romberg (co-PI), George Lan (co-PI), Bistra Dilkina (co-PI), Alper Atamturk (co-PI), Dorit Hochbaum (co-PI), Charles Pierre (co-PI), Period of Contract: July 2021 - 2026, Candidate's Share: $500-750K.

- **Optimization with Trapped Ion Qubits (OPTIQ)**, Agency: DARPA, Overall funding: $9.2 million, Role: Georgia Tech PI, Collaborators: Creston Herold (Georgia Tech Research Institute (lead institute)), John Bollinger, Travis Humble, Duration: January 2020 - January 2024, Candidate's Share: $705K.

- **Disparate Impact on Access to Service and Mitigation Strategies under Pandemic**, Agency: Thos and Clair Muller Research Endowment Fund, Georgia Tech, Overall Amount: $10K, Role: co-PI, Collaborators: Deven R. Desai, Duration: May 2020 - December 2020, Candidate's Share: $10K.

- **NSF CISE CRII Award** for *Faster Iterative Decisions within First-order Optimization Methods*, Agency: National Science Foundation, Overall Funding: $175K, Role: Principal Investigator, Collaborators: none, Duration: June 1 2019 - May 31 2021, Candidate's Share: $175K.

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[12] A news article by GT news was discussed at the Peeples Elemetary School,

Funding for Workshop Organization:

- **Quantum Computing and Operations Research Workshop**, Agency: Fields Institute and National Science Foundation, Overall funding: $14,500 CAD, Role: co-PI, Collaborators: Giacomo Nannicini, Sven Leyffer, Luis Zuluaga, James Ostrowski, Merve Bodur and Ashley Montanaro, Duration: May 2022.
- **Focused Program on Data Science and Optimization**, Agency: Fields Institute, Overall Funding: $100K CAD, Role: co-PI, Collaborators: Sanjeena Dang, Antoine Deza, Paul McNicholas (McMaster University), Sebastian Pokutta and Masashi Sugiyama, Duration: November 2019.

V.   Education

A.   Courses Taught

Semester	Course Number	Course Title	Class Size
Lectures in Executive Education Short Courses			
Fall 2025	Executive Ed	Leading the AI Driven Organization	60
Fall 2025	Executive Ed	Frontiers of Generative AI	27
Spring 2024	Executive Ed	Leading the AI Driven Organization	60
Courses at MIT			
Spring 2024	15.071	The Analytics Edge	33
Spring 2024	15.071	The Analytics Edge	50
Fall 2023	15.081/6.721	Introduction to Mathematical Programming	40

Courses taught at Georgia Institute of Technology's H. Milton Stewart School of Industrial and Systems Engineering (ISyE)

Semester	Course Number	Course Title	Class Size
Fall 2022	ISyE 7661	Linear Inequalities	9
Fall 2021	ISyE 4803-GUP	Online Learning and Decision Making	82
Spring 2021	ISyE 7686	Advanced Combinatorial Optimization	17
Fall 2020	ISyE 4803-GUP	Online Learning and Decision Making	72
Spring 2020	ISyE 7686	Advanced Combinatorial Optimization	6
Fall 2019	ISyE 4803-GUP	Online Learning and Decision Making	63
Spring 2019	ISyE 7686	Advanced Combinatorial Optimization	28
Fall 2018	ISyE 4803-GUP	Online Learning and Decision Making	6

B.   Individual Student Guidance

B.1.   Ph.D. Students

B.1.a   Graduated Ph.D. Students

1. **Hassan Mortagy**, Spring 2023
   Thesis: *Bridging Discrete and Continuous Methods for Faster Optimization & ML*
   Notable Awards: Shabbir Ahmed Research Excellence Award at Georgia Tech, 2022; Honorable Mention in Mixed Integer Programming (MIP) Workshop Poster Competition, 2022; ARC TRIAD Research Fellowship for Spring 2021.
   First Position: OR Scientist, Roadie Inc/UPS.

2. **Jad Salem**, Spring 2023
   Thesis: *Online Learning with a View Toward Fairness*
   First Position: Assistant Professor, Department of Mathematics, US Naval Academy

3. **Reuben Tate**, Spring 2023
   Thesis: *Classical Optimization To Improve Variational Quantum Algorithms*
   First Position: Postdoc Researcher, Los Alamos National Labs

B.1.b. In Progress, Ph.D. Students

1. **Madeleine Pollack**, Operations Research Center, MIT
   Advising Start Date: August 2023
   Notable Awards: Davidson Family Tau Beta Pi Senior Engineering Award (GT, 2023)

2. **Jai Moondra**, Georgia Institute of Technology
   Advising Start Date: January 2021[13]
   Notable Awards: Honorable Mention in Mixed Integer Programming Poster Award (MIP 2022), ARC TRIAD Research Fellowship for Spring 2023

B.1.c. In Progress, Masters Students

3. **Ju Young Lee**, Course 6, Massachusetts Institute of Technology
   Advising Start Date: August 2024

B.1.d   Postdoctoral Associates

1. **Dr. Mehrdad Ghadiri**
   Thesis: *Scalable, Efficient, and Fair Algorithms for Structured Convex Optimization Problems*
   Awards: George B. Dantzig Dissertation Award (honorable mention)
   Ph.D. in Algorithms, Combinatorics and Optimization
   From: School of Computer Science, Georgia Institute of Technology
   Year: 2023-2024.

2. **Dr. Brandon Augustino**
   Thesis: *Quantum Algorithms for Symmetric Cones*
   Ph.D. in Engineering
   From: Department of Industrial and Systems Engineering, Lehigh University
   Year: 2023-2024.

B.2.   Service on Thesis or Dissertation Committees

B.4.a   Internal

– Rares Cristian (Operations Research Center, MIT), advised by Georgia Perakis.
  Committees: Thesis Proposal (Spring 2024)

– Kimberly M Villalobos Carballo (Operations Research Center, MIT), advised by Dimitris Bertsimas.
  Committees: Thesis Defense (Fall 2023)

  Internal Committees at Georgia Tech (2018-23):
– Krishna V Acharya (ISyE, Georgia Tech), advised by Juba Ziani.
  Committees: ML Qualifying Exam (Spring 2023)

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[13]Jai Moondra has been co-advised by Mohit Singh, since October 2022.

- – Samuel L. Hood (ISyE, Georgia Tech), advised by Joel Sokol.
  Committees: ML Qualifying Exam (Spring 2023)
- – Li Chen (CS, Georgia Tech), advised by Richard Peng.
  Committees: Ph.D. proposal (Fall 2021), Defense (Summer 2023)
- – Majid Farhadi (Math, Georgia Tech), advised by Prasad Tetali (CMU).
  Committees: Ph.D. Defense (Spring 2022)
- – Majid Ahmadi (Public Policy, Georgia Tech), advised by Marilyn A. Brown.
  Committees: Ph.D. proposal (Spring 2022)
- – Michael Wigal (Math, Georgia Tech), advised by Xingxing Yu.
  Committees: ACO Research Proposal Committee (Spring 2021)
- – Matthew O'Shaughnessy (ECE, Georgia Tech), advised by C. J. Rozell & M. Davenport.
  Committees: Ph.D. proposal (Fall 2020), Defense (Fall 2021)
- – Alejandro Agustin Carderera De Diego (ISyE, Georgia Tech), advised by Sebastian Pokutta.
  Committees: ML Quals Exam (Fall 2019), Proposal (Spring 2021), Defense (Fall 2021)
- – Cyrille Combettes (ISyE, Georgia Tech), advised by Sebastian Pokutta.
  Committees: ML Quals (Spring 2019), Ph.D. proposal (Fall 2020), Defense (Spring 2021)

B.4.b External

- – Philippe Olivier from Ecole Polytechnique de Montreal, Department of Math & IE.
  Advised by Andrea Lodi. Thesis Defense: May 2021.
- – Ali Khodabhakhsh from UT Austin, Department of ECE.
  Advised by Evdokia Nikolova. Thesis Proposal: Spring 2019, Defense: February 2021.

VI.   Service

A. Professional Contributions

A.1. Editorial Board Memberships

- Associate Editor, Open Journal of Mathematical Optimization, July 2020 - present
- Guest Editor for Fields Institute Communications Series on *Data Science and Optimization*, 2020 - present
- Guest Editor, Health Care Management Science, Special Issue on *Analytical Fairness in Healthcare*, 2021- 2024

A.2. Society Officers, Activities, and Membership

- **Leadership Roles**:
  - – Lead for Technical Thrust of Ethical AI at NSF AI Institute on AI for Optimization, August 2021 - 2023
  - – Co-editor of OPTIMA, the newsletter of the Mathematical Optimization Society, August 2021 - present
  - – INFORMS Computing Society's Quantum Computing Working Group 2020, along with Sven Leyffer, Giacomo Nannicini, Jim Ostrowski and Luis Zuluaga, 2020 - 2022
- **Award Committees**: INFORMS Computing Society Student Paper Competition Committee 2023, SIAM Conference on Applied and Computational Discrete Algorithms (ACDA) Best Student Presentation Prize Committee 2023, INFORMS Diversity Equity and Inclusion (DEI) Best Student Paper Award Committee 2022, INFORMS Doing Good with OR Student Paper Competition 2021

- **Membership in Societies**: Member of the Institute of Electrical and Electronic Engineers (**IEEE**) (2021-present), Member of the Mathematical Optimization Society (**MOS**) (2012-present), Member the Institute for Operations Research and the Management Sciences (**INFORMS**) (2012-present), Member of the Association for Computing Machinery (**ACM**) (2019-present), Member of the Society of Industrial and Applied Mathematics (**SIAM**) (2023-present)

- **Advisory Board:** GoSTEM, collaborative partnership at Georgia Tech between the Center for Education Integrating Science, Mathematics and Computing (CEISMC) and Institute Diversity, Equity and Inclusion (IDEI) (2021-2022)

A.3.   Organization of Workshops and Conferences

- **Organizing Committee for Conferences and Workshops**: Invited Sessions at INFORMS (2012-present), Grid Science Winter School in January 2023[14], ICERM (Institute for Computational and Experimental Research in Mathematics, Brown University) Workshop on Trends in Computational Discrete Optimization in April 2023[15], Workshop on Quantum Computing and Operations Research at Fields Institute in October 2022[16], CCC (Computing Community Consortium)-INFORMS Workshop on Artificial Intelligence and Operations Research Workshop in August 2022 [17], Integer Programming and Combinatorial Optimization (IPCO) 2021 [18], Focused Program on Data Science and Optimization at the Fields Institute, in November 2019[19]

- **Member of Technical Program Committees for Conferences**: Integer Programming and Combinatorial Optimization **IPCO 2024**, Neural Information Processing Systems **NeurIPS 2023** (*area chair*), SIAM Conference on Applied and Computational Discrete Algorithms **ACDA 2023**, ACM Conference on Fairness, Accountability and Transparency **FAccT 2022** (*area chair*), ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization **EAAMO 2022**, International Symposium on Combinatorial Optimization ISCO 2022 (declined[20]), Web and Internet Economics **WINE 2021**, Workshop on Operations of People-Centric Systems **EC workshop 2021**, Foundations of Responsible Computing **FORC 2021** (and publications co-chair), The Web Conference **WWW 2021**, **AAAI** Conference on Artificial Intelligence 2020, **AAAI-20** AI for Social Impact Track 2020, Approximation Algorithms for Combinatorial Optimization Problems **APPROX 2019**

A.4.   Technical Journal or Conference Referee Activities

- **Technical Journal Referee**: ACM Transactions on Algorithms, Quantum, INFORMS Journal on Optimization, Nature (Human Behavior), Management Science, Manufacturing and Service Operations (M&SOM), Mathematical Programming, SIAM Journal of Optimization, Operations Research, Networks, Naval Research Logistics, Discrete Optimization, Theory of Computing

- **Conference Referee**: International Conference on Learning Representations (ICLR) 2020, Neural Information Processing Systems (NeurIPS) 2020 and 2021, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2021 and 2016, ACM-Symposium on Theory of Computing (STOC) 2018

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[14]with Russell Bent, Misha Chertkov, Harsha Nagarajan, Deepjyoti Deka, Kaarthik Sundar, Carleton Coffrin, Adam Mate
[15]with Antoine Deza, Volker Kaibel, David Williamson, Sebastian Pokutta, Amitabh Base, Giacomo Nannicini
[16]with Giacomo Nannicini, Luis Zuluaga, Sven Leyffer, Merve Bodur, Ashley Montanaro and James Ostrowski
[17]with John Dickerson, Bistra Dilkina, Yu Ding, Pascal Van Hentenryck, Sven Koenig, Ramayya Krishnan, Radhika Kulkarni
[18]with Mohit Singh, Santanu Dey and Alejandro Toriello
[19]with Sebastian Pokutta, Sanjeena Dang, Antoine Deza, Paul McNicholas, Masashi Sugiyama
[20]Declined due to unexpected medical reasons.

A.5. Proposal Panels and Reviews

- Panelist for **National Science Foundation** Panels in the Computer and Information Science and Engineering Directorate (CISE): Robust Intelligence in 2021-22 and in 2019-20; Algorithmic Foundations in 2018-19
- External Reviewer for **Air Force Office of Scientific Research**, 2022
- External Reviewer for **Office of Naval Research**, 2020

B. Institute Contributions

B.1. Institute Committee Service

1. Faculty Action Group, Social and Ethical Responsibilities of Computing (SERC), AY 2023-24

B.2. School Committee Service

1. Masters of Business Analytics Admission Committee, 2024-2025, MIT
2. Faculty Search Committee, 2024-2025, Operations Research and Statistics, Sloan School of Management, MIT
3. Graduate Student Admission Committee, 2023 - 2024, Operations Research Center, MIT
4. Faculty Search Committee, 2023-2024, Operations Research and Statistics, Sloan School of Management, MIT