John P Dickerson

Curriculum Vitae

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Personal Information

I am on leave—from my tenured position at the University of Maryland—at Arthur, as cofounder and Chief Scientist. I maintain my tenured role at Maryland but am currently focusing my time on growing Arthur.

Academic Experience

2022–	U. of Maryland	Associate Professor, Department of Computer Science
2016–22		Assistant Professor, Department of Computer Science
	Joint Appointment	Institute for Advanced Computer Studies (UMIACS)
	Affiliation	Applied Math/Stats and Scientific Computation (AMSC)
	Affiliation	Human-Computer Interaction Lab (HCIL)
2010–16	CMU	Graduate Research Assistant, Electronic Marketplaces Lab

Education

2016	Ph.D.	Carnegie Mellon University	Computer Science
2014	M.Sc.	Carnegie Mellon University	Computer Science
2008	B.Sc.	University of Maryland	Computer Science
2008	B.Sc.	University of Maryland	Mathematics

Industry & Non-Profit Experience

2019–	Arthur	Co-founder and Chief Scientist
2018–20	Facebook	Research Scientist (via PRO Unlimited)
2018–	Public Spend Forum	Advisor
2018–21	Ensu (*née* Zenful)	Advisor
2012–	Optimized Markets	Algorithms & optimization consultant
2010–	OPTN/UNOS	Algorithms advisor for US national kidney exchange
2008–12	U. of Maryland	Researcher, Lab for Computational Cultural Dynamics
2005	IBM	Global Contract Preparation System (GCPS)
2003–04	US Dept of Defense	Bioinformatics and security R&D

Research Fellowships, Prizes, & Awards

2022	Best Paper Honorable Mention, CHI 2022
2021	Google AI for Social Good Award
2021	Google Research Scholar Award
2020	IEEE *Intelligent Systems* AI's 10 to Watch
2020	Graduate Faculty Mentor of the Year (*UMD university-wide award*)
2019	National Science Foundation CAREER Award
2019	Google Faculty Research Award
2018	Outstanding Student Paper Honorable Mention, AAAI 2018.
2015–17	Facebook Fellowship
2015–16	Siebel Scholarship
2014	FutureMatch, our framework for dynamic matching, won HPCWire's "Best Data-Intensive Application" award (joint with Pittsburgh Supercomputing Center)
2012–15	NDSEG Fellowship

Research, Scholarly, Creative and/or Professional Activities

Books

1. Subrahmanian, V, A Mannes, A Sliva, J Shakarian, and JP Dickerson. *Computational Analysis of Terrorist Groups: Lashkar-e-Taiba*. New York: Springer, 2012. ISBN: 978-1-4614-4768-9.

Book chapters

1. McElfresh, DC, S Dooley, C Cui, K Griesman, W Wang, T Will, N Sehgal, and JP Dickerson. "Can an Algorithm be My Healthcare Proxy?" In: *Explainable AI in Healthcare and Medicine*. Ed. by A Shaban-Nejad, M Michalowski, and DL Buckeridge. Springer, 2020.
2. Dickerson, JP, GI Simari, and V Subrahmanian. "Using Temporal Probabilistic Rules to Learn Group Behavior". In: *Handbook of Computational Approaches to Counterterrorism*. Ed. by V Subrahmanian. Springer New York, 2013.
3. Simari, GI, JP Dickerson, A Sliva, and V Subrahmanian. "Policy Analytics Generation using Action Probabilistic Logic Programs". In: *Handbook of Computational Approaches to Counterterrorism*. Ed. by V Subrahmanian. Springer New York, 2013.
4. Shakarian, P, JP Dickerson, and V Subrahmanian. "Geospatial Abduction with Adaptive Adversaries". In: *Geospatial Abduction: Principles and Practice*. Ed. by P Shakarian and V Subrahmanian. Springer, 2012. Chap. 4.

Journal papers

1. Dickerson, JP, KA Sankararaman, A Srinivasan, and P Xu. Allocation Problems in Ride-Sharing Platforms: Online Matching with Offline Reusable Resources. *ACM Transactions on Economics and Computation (TEAC)* **9**(3) (2021).
2. Ahmed, F, JP Dickerson, and M Fuge. Forming Diverse Teams from Sequentially Arriving People. *Journal of Mechanical Design (JMD)* **142**(11) (2020).
3. Blum, A, JP Dickerson, N Haghtalab, AD Procaccia, T Sandholm, and A Sharma. Ignorance is Almost Bliss: Near-Optimal Stochastic Matching With Few Queries. *Operations Research* **68**(1) (2020), 16–34.
4. Freedman, R, J Schaich Borg, W Sinnott-Armstrong, JP Dickerson, and V Conitzer. Adapting a Kidney Exchange Algorithm to Align with Human Values. *Artificial Intelligence (AIJ)* **283** (2020), 103261.
5. Dickerson, JP, AD Procaccia, and T Sandholm. Failure-Aware Kidney Exchange. *Management Science* **65**(4) (2019), 1768–1791.
6. Doebel, S, JP Dickerson, JD Hoover, and Y Munakata. Using language to get ready: Familiar labels help children to engage proactive control. *Journal of Experimental Child Psychology* **166** (2018), 147–159.
7. Dickerson, JP and T Sandholm. Multi-Organ Exchange. *Journal of Artificial Intelligence Research (JAIR)* **60** (2017), 639–679.
8. Erickson, LC, ED Thiessen, KE Godwin, JP Dickerson, and AV Fisher. Endogenously- and Exogenously-driven Selective Sustained Attention: Contributions to Learning in Kindergarten Children. *Journal of Experimental Child Psychology* **138** (2015), 126–134.
9. Sawant, A, JP Dickerson, MT Hajiaghayi, and V Subrahmanian. Automated Generation of Counter-Terrorism Policies using Multi-Expert Input. *ACM Transactions on Intelligent Systems and Technology (TIST)* **6**(4) (2015), 44:1–44:27.
10. Fisher, A, E Thiessen, K Godwin, H Kloos, and JP Dickerson. Assessing selective sustained attention in 3- to 5-year-old children: Evidence from a new paradigm. *Journal of Experimental Child Psychology* **114**(2) (2013), 275–294.
11. Simari, GI, JP Dickerson, A Sliva, and V Subrahmanian. Parallel Abductive Query Answering in Probabilistic Logic Programs. *ACM Transactions on Computational Logic (TOCL)* **14**(2) (2013), 12:1–12:39.
12. Patro, R, JP Dickerson, S Bista, SK Gupta, and A Varshney. Speeding Up Particle Trajectory Simulations under Moving Force Fields using GPUs. *ASME Journal of Computing and Information Science in Engineering (JCISE)* **12**(2) (2012), 021006:1–021006:8.
13. Shakarian, P, JP Dickerson, and V Subrahmanian. Adversarial Geospatial Abduction Problems. *ACM Transactions on Intelligent Systems and Technology (TIST)* **3**(2) (2012), 34:1–34:35.
14. Subrahmanian, V and JP Dickerson. What Can Virtual Worlds and Games Do for National Security? *Science* **326**(5957) (2009), 1201–1202.

Highly-refereed conference papers

Conferences are the primary publication venue in Computer Science, with competitive acceptance rates of 15–30%. *This section contains papers published in highly-selective, "top-tier" conference proceedings. Some author lists appear in alphabetical order, which is the tradition in mathematics, operations research, and theoretical computer science; some appear in contribution order, which is the tradition in AI/ML.*

1. Bansal, A, Py Chiang, M Curry, R Jain, C Wigington, V Manjunatha, JP Dickerson, and T Goldstein. Certified Neural Network Watermarks with Randomized Smoothing. In: *International Conference on Machine Learning (ICML)*. 2022.
2. Chakrabarti, D, JP Dickerson, SA Esmaeili, A Srinivasan, and L Tsepenekas. A New Notion of Individually Fair Clustering: α-Equitable k-Center. In: *International Conference on Artificial Intelligence and Statistics (AISTATS)*. 2022.
3. Curry, M, U Lyi, T Goldstein, and JP Dickerson. Learning Revenue-Maximizing Auctions With Differentiable Matching. In: *International Conference on Artificial Intelligence and Statistics (AISTATS)*. 2022.
4. Dooley, S, D Turjeman, JP Dickerson, and E Redmiles. Field Evidence of the Effects of Pro-sociality and Transparency on COVID-19 App Attractiveness. In: *Conference on Human Factors in Computing Systems (CHI)*. 2022.
5. Dooley, S, G Wei, T Goldstein, and JP Dickerson. Robustness Disparities in Face Detection. In: *Conference on Neural Information Processing Systems (NeurIPS) Datasets and Benchmarks Track*. 2022.
6. Durvasula, N, A Srinivasan, and JP Dickerson. Forecasting Patient Outcomes in Kidney Exchange. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. AI for Good Track. 2022.
7. Esmaeili, S, S Duppala, JP Dickerson, and B Brubach. Fair Labelled Clustering. In: *International Conference on Knowledge Discovery and Data Mining (KDD)*. 2022.
8. Knittel, M, S Dooley, and JP Dickerson. The Dichotomous Affiliate Stable Matching Problem: Approval-Based Matching with Applicant-Employer Relations. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. 2022.
9. Kumar, IE, K Hines, and JP Dickerson. Equal Credit Opportunity in Algorithms: Aligning Algorithmic Fairness Research with US Fair Lending Regulation. In: *Conference on Artificial Intelligence, Ethics, and Society (AIES)*. 2022.
10. McElfresh, D, S Khandagale, J Valverde, JP Dickerson, and C White. On the Generalizability and Predictability of Recommender Systems. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2022.
11. Nanda, V, T Speicher, C Kolling, JP Dickerson, K Gummadi, and A Weller. Measuring Representational Robustness of Neural Networks Through Shared Invariances. In: *International Conference on Machine Learning (ICML)*. 2022.
12. Schumann, C, Z Lang, N Mattei, and JP Dickerson. Group Fairness in Bandit Arm Selection. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2022.
13. Sullivan, R, J Terry, B Black, and JP Dickerson. Cliff Diving: Exploring Reward Surfaces in Reinforcement Learning Environments. In: *International Conference on Machine Learning (ICML)*. 2022.
14. Verma, S, K Hines, and JP Dickerson. Amortized Generation of Sequential Algorithmic Recourses for Black-box Models. In: *Conference on Artificial Intelligence (AAAI)*. 2022.
15. Aziz, H, A Cseh, JP Dickerson, and DC McElfresh. Optimal Kidney Exchange with Immunosuppressants. In: *Conference on Artificial Intelligence (AAAI)*. 2021.
16. Brubach, B, D Chakrabarti, JP Dickerson, A Srinivasan, and L Tsepenekas. Fairness, Semi-Supervised Learning, and More: A General Framework for Clustering with Stochastic Pairwise Constraints. In: *Conference on Artificial Intelligence (AAAI)*. 2021.
17. Cherepanova, V, M Goldblum, H Foley, S Duan, JP Dickerson, G Taylor, and T Goldstein. LowKey: Leveraging Adversarial Attacks to Protect Social Media Users from Facial Recognition. In: *International Conference on Learning Representations (ICLR)*. 2021.
18. Christia, F, M Curry, C Daskalakis, E Demaine, JP Dickerson, M Hajiaghayi, A Hesterberg, M Knittel, and A Milliff. Scalable Equilibrium Computation in Multi-agent Influence Games on Networks. In: *Conference on Artificial Intelligence (AAAI)*. 2021.
19. Ding, M, K Kong, J Li, C Zhu, JP Dickerson, F Huang, and T Goldstein. VQ-GNN: A Universal Framework to Scale up Graph Neural Networks using Vector Quantization. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2021.

20. Esmaeili, SA, B Brubach, A Srinivasan, and JP Dickerson. Fair Clustering Under a Bounded Cost. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2021.
21. Li, J, M Zhang, K Xu, JP Dickerson, and J Ba. How does a Neural Network's Architecture Impact its Robustness to Noisy Labels? In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2021.
22. McElfresh, DC, L Chan, K Doyle, W Sinnott-Armstrong, V Conitzer, J Schaich Borg, and JP Dickerson. Indecision Modeling. In: *Conference on Artificial Intelligence (AAAI)*. 2021.
23. Nanda*, V, S Dooley*, S Singla, S Feizi, and JP Dickerson. Fairness Through Robustness: Investigating Robustness Disparity in Deep Learning. In: *Conference on Fairness, Accountability, and Transparency (FAccT)*. 2021.
24. Peri, N, M Curry, S Dooley, and JP Dickerson. PreferenceNet: Encoding Human Preferences in Auction Design with Deep Learning. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2021.
25. Raman, N, S Shah, and JP Dickerson. Data-Driven Methods for Balancing Fairness and Efficiency in Ride-Pooling. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. 2021.
26. Schwarzschild, A, M Goldblum, A Gupta, JP Dickerson, and T Goldstein. Measuring the Effectiveness of Dataset Manipulation Attacks. In: *International Conference on Machine Learning (ICML)*. 2021.
27. Ahmadi, S, F Ahmed, JP Dickerson, M Fuge, and S Khuller. An Algorithm for Multi-Attribute Diverse Matching. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. 2020.
28. Bidkhori, H, JP Dickerson, DC McElfresh, and K Ren. Kidney Exchange with Inhomogeneous Edge Existence Uncertainty. In: *Conference on Uncertainty in Artificial Intelligence (UAI)*. 2020.
29. Brubach, B, D Chakrabarti, JP Dickerson, S Khuller, A Srinivasan, and L Tsepenekas. A Pairwise Fair and Community Preserving Approach to k-Center Clustering. In: *International Conference on Machine Learning (ICML)*. 2020.
30. Chan, L, K Doyle, DC McElfresh, V Conitzer, JP Dickerson, J Schaich Borg, and W Sinnott-Armstrong. Artificial Artificial Intelligence: Measuring Influence of AI "Assessments" on Moral Decision-Making. In: *Conference on Artificial Intelligence, Ethics, and Society (AIES)*. 2020.
31. Chiang, Py, M Curry, A Abdelkader, A Kumar, JP Dickerson, and T Goldstein. Detection as Regression: Certified Object Detection with Median Smoothing. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2020.
32. Curry, M, Py Chiang, T Goldstein, and JP Dickerson. Certifying Strategyproof Auction Networks. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2020.
33. Esmaeili, S, B Brubach, L Tsepenekas, and JP Dickerson. Probabilistic Fair Clustering. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2020.
34. McElfresh, DC, M Curry, T Sandholm, and JP Dickerson. Improving Policy-Constrained Kidney Exchange via Pre-Screening. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2020.
35. McElfresh, DC, C Kroer, S Pupyrev, E Sodomka, N Dexter, KA Sankararaman, Z Chauvin, and JP Dickerson. Matching Algorithms for Blood Donation. In: *Conference on Economics and Computation (EC)*. 2020.
36. Nanda, V, P Xu, KA Sankararaman, JP Dickerson, and A Srinivasan. Balancing the Tradeoff between Profit and Fairness in Rideshare Platforms during High-Demand Hours. In: *Conference on Artificial Intelligence (AAAI)*. Earlier version appeared at AIES-20. 2020.
37. Saha, D, C Schumann, DC McElfresh, JP Dickerson, ML Mazurek, and MC Tschantz. Measuring Non-Expert Comprehension of Machine Learning Fairness Metrics. In: *International Conference on Machine Learning (ICML)*. Earlier version appeared at AIES-20. 2020.
38. Shafahi, A, M Najibi, Z Xu, JP Dickerson, LS Davis, and T Goldstein. Universal Adversarial Training. In: *Conference on Artificial Intelligence (AAAI)*. 2020.
39. Curry, M, JP Dickerson, KA Sankararaman, A Srinivasan, Y Wan, and P Xu. Mix and Match: Markov Chains and Mixing Times for Matching in Rideshare. In: *Conference on Web and Internet Economics (WINE)*. 2019.
40. Dickerson, JP, KA Sankararaman, K Sarpatwar, A Srinivasan, KL Wu, and P Xu. Online Resource Allocation with Matching Constraints. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2019.
41. Dickerson, JP, KA Sankararaman, A Srinivasan, and P Xu. Balancing Relevance and Diversity in Online Bipartite Matching via Submodularity. In: *Conference on Artificial Intelligence (AAAI)*. 2019.
42. McElfresh, D, H Bidkhori, and JP Dickerson. Scalable Robust Kidney Exchange. In: *Conference on Artificial Intelligence (AAAI)*. 2019.
43. Schumann, C, SN Counts, J Foster, and JP Dickerson. The Diverse Cohort Selection Problem. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2019.

44. Schumann, C, Z Lang, J Foster, and JP Dickerson. Making the Cut: A Bandit-based Approach to Tiered Interviewing. In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2019.
45. Shafahi, A, MA Ghiasi, M Najibi, F Huang, JP Dickerson, and T Goldstein. Logit-Similarity: Defending, Understanding, and Generalizing Logit-Squeezing. In: *British Machine Vision Conference (BMVC)*. 2019.
46. Shafahi, A, M Najibi, MA Ghiasi, Z Xu, JP Dickerson, C Studer, LS Davis, G Taylor, and T Goldstein. Adversarial Training for Free! In: *Conference on Neural Information Processing Systems (NeurIPS)*. 2019.
47. Xu, P, Y Shi, H Cheng, JP Dickerson, KA Sankararaman, A Srinivasan, Y Tong, and L Tsepenekas. A Unified Approach to Online Matching with Conflict-Aware Constraints. In: *Conference on Artificial Intelligence (AAAI)*. 2019.
48. Dickerson, JP, KA Sankararaman, A Srinivasan, and P Xu. Allocation Problems in Ride-Sharing Platforms: Online Matching with Offline Reusable Resources. In: *Conference on Artificial Intelligence (AAAI)*. 2018.
49. Dickerson, JP, KA Sankararaman, A Srinivasan, and P Xu. Assigning Tasks to Workers based on Historical Data: Online Matching with Two-sided Arrivals. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2018.
50. Freedman, R, J Schaich Borg, W Sinnott-Armstrong, JP Dickerson, and V Conitzer. Adapting a Kidney Exchange Algorithm to Align with Human Values. In: *Conference on Artificial Intelligence (AAAI)*. **Outstanding Student Paper Honorable Mention**. 2018.
51. Li, Z, N Gupta, S Das, and JP Dickerson. Equilibrium Behavior in Competing Dynamic Matching Markets. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. 2018.
52. McElfresh, D and JP Dickerson. Balancing Lexicographic Fairness and a Utilitarian Objective with Application to Kidney Exchange. In: *Conference on Artificial Intelligence (AAAI)*. 2018.
53. Redmiles, EM, M Mazurek, and JP Dickerson. Dancing Pigs or Externalities? Measuring the Rationality of Security Decisions. In: *Conference on Economics and Computation (EC)*. 2018.
54. Ahmed, F, JP Dickerson, and M Fuge. Diverse Weighted Bipartite b-Matching. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. 2017.
55. Dickerson, JP, AM Kazachkov, AD Procaccia, and T Sandholm. Small Representations of Big Kidney Exchange Graphs. In: *Conference on Artificial Intelligence (AAAI)*. 2017.
56. Farina, G, JP Dickerson, and T Sandholm. Operation Frames and Clubs in Kidney Exchange. In: *International Joint Conference on Artificial Intelligence (IJCAI)*. 2017.
57. Dickerson, JP, D Manlove, B Plaut, T Sandholm, and J Trimble. Position-Indexed Formulations for Kidney Exchange. In: *Conference on Economics and Computation (EC)*. 2016.
58. Plaut, B, JP Dickerson, and T Sandholm. Fast Optimal Clearing of Capped-Chain Barter Exchanges. In: *Conference on Artificial Intelligence (AAAI)*. 2016.
59. Blum, A, JP Dickerson, N Haghtalab, AD Procaccia, T Sandholm, and A Sharma. Ignorance is Almost Bliss: Near-Optimal Stochastic Matching With Few Queries. In: *Conference on Economics and Computation (EC)*. 2015.
60. Das, S, JP Dickerson, Z Li, and T Sandholm. Competing Dynamic Matching Markets. In: *Conference on Auctions, Market Mechanisms, and Their Applications (AMMA)*. 2015.
61. Dickerson, JP and T Sandholm. FutureMatch: Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments. In: *Conference on Artificial Intelligence (AAAI)*. 2015.
62. Hajaj, C, JP Dickerson, A Hassidim, T Sandholm, and D Sarne. Strategy-Proof and Efficient Kidney Exchange Using a Credit Mechanism. In: *Conference on Artificial Intelligence (AAAI)*. 2015.
63. Dickerson, JP, J Goldman, J Karp, AD Procaccia, and T Sandholm. The Computational Rise and Fall of Fairness. In: *Conference on Artificial Intelligence (AAAI)*. 2014.
64. Dickerson, JP, V Kagan, and V Subrahmanian. Using Sentiment to Detect Bots on Twitter: Are Humans more Opinionated than Bots? In: *International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*. 2014.
65. Dickerson, JP, AD Procaccia, and T Sandholm. Price of Fairness in Kidney Exchange. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2014.
66. Dickerson, JP and T Sandholm. Multi-Organ Exchange: The Whole is Greater than the Sum of its Parts. In: *Conference on Artificial Intelligence (AAAI)*. 2014.
67. Erickson, LC, ED Thiessen, KE Godwin, JP Dickerson, and AV Fisher. Endogenously- but not Exogenously-driven Selective Sustained Attention is Related to Learning in a Classroom-like Setting in Kindergarten Children. In: *Conference of the Cognitive Science Society (CogSci)*. 2014.

68. Dickerson, JP, AD Procaccia, and T Sandholm. Failure-Aware Kidney Exchange. In: *Conference on Economics and Computation (EC)*. 2013.
69. Dickerson, JP and T Sandholm. Throwing darts: Random sampling helps tree search when the number of short certificates is moderate. In: *Conference on Artificial Intelligence (AAAI)*. Late-breaking paper. 2013.
70. Dickerson, JP, A Sawant, M Hajiaghayi, and V Subrahmanian. PREVE: A Policy Recommendation Engine based on Vector Equilibria Applied to Reducing LeT's Attacks. In: *International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*. 2013.
71. Dickerson, JP, AD Procaccia, and T Sandholm. Dynamic Matching via Weighted Myopia with Application to Kidney Exchange. In: *Conference on Artificial Intelligence (AAAI)*. 2012.
72. Dickerson, JP, AD Procaccia, and T Sandholm. Optimizing Kidney Exchange with Transplant Chains: Theory and Reality. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2012.
73. Dickerson, JP, GI Simari, V Subrahmanian, and S Kraus. A Graph-Theoretic Approach to Protect Static and Moving Targets from Adversaries. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. 2010.

Workshop and smaller conference papers

Often, preliminary work is presented at workshops without formal proceedings or smaller conferences before appearing as a full paper in a selective conference. This section lists early-stage work that appeared in workshops and smaller conferences with light peer review. It is highly likely that I have missed some listings here, especially in more recent years.

1. Bandyopadhyay, S, D Raghunandan, D Sahrawat, and JP Dickerson. Preventing Deforestation: Modeling and Prediction of Vulnerabilities in Forest Conservation. In: *AI to Accelerate Science and Engineering (AI2ASE) Workshop at AAAI-22*. 2022.
2. Prins, A, C Herlihy, and JP Dickerson. What Should I Grow Today so I Make Money Tomorrow? Supporting Small Farmers' Crop Planning with Social, Environmental, and Market Data. In: *Practical ML for Developing Countries Workshop at ICLR-22*. 2022.
3. Chan, J, H Daumé III, JP Dickerson, H Kacorri, and B Shneiderman. Supporting human flourishing by ensuring human involvement in AI systems. In: *Workshop on Human Centered AI (HCAI) at NeurIPS-21*. 2021.
4. Curry, M, U Lyi, T Goldstein, and JP Dickerson. Learning Revenue-Maximizing Auctions With Differentiable Matching. In: *Workshop on Optimal Transport and Machine Learning at NeurIPS-21*. 2021.
5. Dai, J, K Kwegyir-Aggrey, K Hines, and JP Dickerson. Enabling Flexible Downstream Fairness With Geometric Repair. In: *Measures and Best Practices for Responsible AI (RAI) Workshop at KDD-21*. 2021.
6. Durvasula, N, JP Dickerson, and A Srinivasan. A Bayesian Optimization Approach to Estimating Expected Match Time and Organ Quality in Kidney Exchange. In: *AI for Public Health (AI4PH) Workshop at ICLR-21*. 2021.
7. Herlihy, C, S Huang, M Diep, N Johnson, N Sehgal, JP Dickerson, D Jackson, and C Baur. An mHealth Intervention for African American and Hispanic Adults: Preliminary Results from a One-Year Field Test. In: *Machine Learning in Public Health (MLPH) Workshop at NeurIPS-21*. 2021.
8. Li, J, M Zhang, K Xu, JP Dickerson, and J Ba. How does a Neural Network's Architecture Impact its Robustness to Noisy Labels? In: *Workshop on Uncertainty and Robustness in Deep Learning at ICML-21*. 2021.
9. McElfresh, D, K Ren, JP Dickerson, and H Bidkhori. Distributionally Robust Cycle and Chain Packing with Application to Organ Exchange. In: *Winter Simulation Conference (WSC)*. 2021.
10. Nanda, V, DC McElfresh, and JP Dickerson. Learning to Explain Machine Learning. In: *Operationalizing Human-Centered Perspectives in Explainable AI (HCXAI) Workshop at CHI-21*. 2021.
11. Resnik, P, G Coppersmith, JP Dickerson, C Espy-Wilson, and D Kelly. Achieving Scalability without Sacrificing Validity: Clinical Validation of Online Self-Report Scales for Schizophrenia and Depression. In: *Computational Approaches to Mental Health (CA4MH) Workshop at ICML-21*. 2021.
12. Verma, S, JP Dickerson, and K Hines. Counterfactual Explanations for Machine Learning: Challenges Revisited. In: *Operationalizing Human-Centered Perspectives in Explainable AI (HCXAI) Workshop at CHI-21*. 2021.
13. Verma, S, K Hines, and JP Dickerson. Generating Fast Counterfactual Explanations for Black-box Models Using Reinforcement Learning. In: *Explainable Agency in Artificial Intelligence (XAI) Workshop at AAAI-21*. 2021.

14. Ahmadi, S, F Ahmed, JP Dickerson, M Fuge, and S Khuller. On Diverse Bipartite b-Matching. In: *Workshop on Negative Dependence and Submodularity in Machine Learning at ICML-20*. Subsumed by IJCAI-20 paper. 2020.
15. Chan, L, K Doyle, DC McElfresh, V Conitzer, JP Dickerson, J Schaich Borg, and W Sinnott-Armstrong. Artificial Artificial Intelligence: Measuring Influence of AI "Assessments" on Moral Decision-Making. In: *Mechanism Design for Social Good (MD4SG)*. Abstract-only publication; subsumed by AIES-20 paper. 2020.
16. Cherepanova, V, M Goldblum, H Foley, S Duan, JP Dickerson, G Taylor, and T Goldstein. LowKey: Leveraging Adversarial Attacks to Protect Social Media Users from Facial Recognition. In: *Resistance AI Workshop at NeurIPS-20*. 2020.
17. Curry, M, Py Chiang, T Goldstein, and JP Dickerson. Certifying Strategyproof Auction Networks. In: *ML for Economic Policy workshop at NeurIPS-20*. Subsumed by NeurIPS-20 paper. 2020.
18. Dooley, S, C Schumann, HC Shing, JP Dickerson, and P Resnik. Sequential Decision Making in Resource Constrained Global Health Settings. In: *Machine Learning for Global Health Workshop at ICML-20*. 2020.
19. McElfresh, DC, S Dooley, C Cui, K Griesman, W Wang, T Will, N Sehgal, and JP Dickerson. Can an Algorithm be My Healthcare Proxy? In: *Workshop on Health Intelligence at AAAI-20*. 2020.
20. Nanda, V, P Xu, KA Sankararaman, JP Dickerson, and A Srinivasan. Balancing the Tradeoff between Profit and Fairness in Rideshare Platforms during High-Demand Hours. In: *Conference on Artificial Intelligence, Ethics, and Society (AIES)*. Abstract-only publication; subsumed by AAAI-20 paper. 2020.
21. Peri, N, N Gupta, RW Huang, C Zhu, L Fowl, S Feizi, T Goldstein, and JP Dickerson. Deep k-NN Defense against Clean-label Data Poisoning Attacks. In: *Workshop on Adversarial Robustness in the Real World at ECCV-20*. 2020.
22. Raman, N, S Shah, and JP Dickerson. Data-Driven Methods for Balancing Fairness and Efficiency in Ride-Pooling. In: *ML for Economic Policy workshop at NeurIPS-20*. 2020.
23. Saha, D, C Schumann, DC McElfresh, JP Dickerson, ML Mazurek, and MC Tschantz. Human Comprehension of Fairness in Machine Learning. In: *Mechanism Design for Social Good (MD4SG)*. Abstract-only publication; subsumed by ICML-20 paper. 2020.
24. Saha, D, C Schumann, DC McElfresh, JP Dickerson, ML Mazurek, and MC Tschantz. Human Comprehension of Fairness in Machine Learning. In: *Conference on Artificial Intelligence, Ethics, and Society (AIES)*. Abstract-only publication; subsumed by ICML-20 paper. 2020.
25. Schumann, C, JS Foster, N Mattei, and JP Dickerson. We Need Fairness and Explainability in Algorithmic Hiring. In: *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. Blue Sky Track. 2020.
26. Schumann, C, Z Lang, N Mattei, and JP Dickerson. Group Fairness in Bandits with Biased Feedback. In: *Mechanism Design for Social Good (MD4SG)*. Abstract-only publication. 2020.
27. Verma, S, JP Dickerson, and K Hines. Counterfactual Explanations for Machine Learning: A Review. In: *ML Retrospectives, Surveys & Meta-Analyses (ML-RSA) Workshop at NeurIPS-20*. 2020.
28. Zeyu, Z and JP Dickerson. Clearing the Kidney Exchange Through Graph Neural Network Guided Tree Search. In: *Student Abstract at AAAI-20*. 2020.
29. Curry, MJ, DC McElfresh, X You, C Moy, F Huang, T Goldstein, and JP Dickerson. Reinforcement Learning for Dynamic Set Packing. In: *Conference on Reinforcement Learning and Decision Making (RLDM)*. 2019.
30. McElfresh, DC, C Kroer, S Pupyrev, E Sodomka, and JP Dickerson. Matching Algorithms for Blood Donation. In: *Mechanism Design for Social Good (MD4SG)*. 2019.
31. McElfresh, DC, C Kroer, S Pupyrev, E Sodomka, and JP Dickerson. Matching Algorithms for Blood Donation. In: *AI for Social Good Workshop at IJCAI-19*. 2019.
32. Schumann, C, Z Lang, N Mattei, and JP Dickerson. Group Fairness in Bandit Arm Selection. In: *Machine Learning and Causal Inference for Improved Decision Making workshop at NeurIPS-19*. 2019.
33. Cui, G, JP Dickerson, N Durvasula, W Gasarch, E Metz, J Prinz, N Raman, D Smolyak, and SH Yoo. A Muffin-Theorem Generator. In: *International Conference on Fun with Algorithms (FUN)*. Working paper. Full version available as "The Muffin Problem" at arXiv:abs/1709.02452. 2018.
34. Freedman, R, J Schaich Borg, W Sinnott-Armstrong, JP Dickerson, and V Conitzer. Adapting a Kidney Exchange Algorithm to Align with Human Values. In: *Conference on Artificial Intelligence, Ethics, and Society (AIES)*. Abstract-only publication; subsumed by AAAI-18 and AIJ-20 papers. 2018.
35. McElfresh, D and JP Dickerson. Balancing Lexicographic Fairness and a Utilitarian Objective with Application to Kidney Exchange. In: *2018 Workshop on Health Intelligence (W3PHIAI) at AAAI-18*. 2018.

36. Dickerson, JP, AM Kazachkov, AD Procaccia, and T Sandholm. Small Representations of Big Kidney Exchange Graphs. In: *Workshop on AI and OR for Social Good (AIORSocGood) at AAAI-17*. 2017.
37. Farina, G, JP Dickerson, and T Sandholm. Inter-Club Kidney Exchange. In: *Workshop on AI and OR for Social Good (AIORSocGood) at AAAI-17*. 2017.
38. Farina, G, JP Dickerson, and T Sandholm. Multiple Willing Donors and Organ Clubs in Kidney Exchange. In: *Algorithmic Game Theory (AGT) workshop at IJCAI-17*. 2017.
39. Schumann, C, SN Counts, J Foster, and JP Dickerson. The Diverse Cohort Selection Problem: Multi-Armed Bandits with Varied Pulls. In: *Aligned AI Workshop at NIPS-17*. 2017.
40. Schumann, C, SN Counts, J Foster, and JP Dickerson. The Diverse Cohort Selection Problem: Multi-Armed Bandits with Varied Pulls. In: *Women in Machine Learning (WiML) Workshop at NIPS-17*. 2017.
41. Dickerson, JP, AM Kazachkov, AD Procaccia, and T Sandholm. Small Representations of Big Kidney Exchange Graphs. In: *Exploring Beyond the Worst Case in Computational Social Choice (EXPLORE) workshop at AAMAS-2016*. **Most Visionary Paper**. 2016.
42. Dickerson, JP and T Sandholm. Uncertainty in Dynamic Matching with Application to Organ Exchange. In: *Machine Learning for Healthcare (MLHC) workshop at NIPS-2015*. 2015.
43. Banaszak, S, E Bowman, JP Dickerson, and V Subrahmanian. Forecasting Country Stability in North Africa. In: *Joint Intelligence & Security Informatics Conference (JISIC)*. 2014.
44. Dickerson, JP. Robust Dynamic Optimization with Application to Kidney Exchange. In: *Doctoral Consortium at AAMAS-2014*. 2014.
45. Dickerson, JP, J Goldman, J Karp, AD Procaccia, and T Sandholm. The Computational Rise and Fall of Fairness. In: *Exploring Beyond the Worst Case in Computational Social Choice (EXPLORE) workshop at AAMAS-2014*. 2014.
46. Dickerson, JP, AD Procaccia, and T Sandholm. Empirical Price of Fairness in Failure-Aware Kidney Exchange. In: *Towards Better and more Affordable Healthcare: Incentives, Game Theory, and Artificial Intelligence (HCAGT) workshop at AAMAS-2014*. 2014.
47. Dickerson, JP and T Sandholm. Balancing Efficiency and Fairness in Dynamic Kidney Exchange. In: *Modern Artificial Intelligence for Health Analytics (MAIHA) workshop at AAAI-2014*. 2014.
48. Dickerson, JP and T Sandholm. Liver and Multi-Organ Exchange. In: *IJCAI-2013 Workshop on Constraint Reasoning, Planning and Scheduling Problems for a Sustainable Future (COPLAS)*. 2013.
49. Dickerson, JP and T Sandholm. Throwing darts: Random sampling helps tree search when the number of short certificates is moderate. In: *International Symposium on Combinatorial Search (SoCS)*. 2013.
50. Dickerson, JP, A Mannes, and V Subrahmanian. Dealing with Lashkar-e-Taiba: A Multi-Player Game-Theoretic Perspective. In: *International Symposium on Open Source Intelligence and Web Mining*. 2011.
51. Simari, GI, JP Dickerson, and V Subrahmanian. Cost-based Query Answering in Action Probabilistic Logic Programs. In: *International Conference on Scalable Uncertainty Management (SUM)*. 2010.
52. Dickerson, JP, MV Martinez, D Reforgiato, and V Subrahmanian. CIG: Cultural Islands and Games. In: *International Conference on Computational Cultural Dynamics*. 2008.

Refereed and invited tutorials

1. Brubach, B, D Chakrabarty, JP Dickerson, S Esmaeili, M Kleindessner, M Knittel, J Morgenstern, S Samadi, A Srinivasan, and L Tsepenekas. *Fairness in Clustering*. Half-day tutorial at Conference on Artificial Intelligence (AAAI). Feb. 2022.
2. Dickerson, JP, E O'Sullivan, B Powers, and B Sundheimer. *Translation Tutorial: From Publishing to Practice: Bringing AI Model Monitoring to a Healthcare Setting*. Tutorial at the Conference on Fairness, Accountability, and Transparency (FAccT). Mar. 2021.
3. Ahmed, F, S Das, JP Dickerson, D McElfresh, and B Wilder. *Optimization & Learning Approaches to Resource Allocation for Social Good*. Half-day tutorial at the International Joint Conference on Artificial Intelligence (IJCAI) (rescheduled to January 2021 due to COVID.) July 2020.
4. Ahmed, F, S Das, JP Dickerson, D McElfresh, and B Wilder. *Optimization & Learning Approaches to Resource Allocation for Social Good*. Half-day tutorial at the Conference on Artificial Intelligence (AAAI). Feb. 2020.
5. Das, S, JP Dickerson, and B Wilder. *Optimization & Learning Approaches to Resource Allocation for Social Good*. Half-day tutorial at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS). May 2019.

6. Dickerson, JP. *Some Thoughts on Ethical Issues in Kidney Exchange*. Tutorial at a joint session between the Workshop of the European Network for Collaboration in Kidney Exchange Programmes (ENCKEP) and Conference on Economic Design (CED). June 2019.
7. Dickerson, JP. *Ethical Market Design via Optimization*. Three 1.5-hour lectures at the Cornell, Maryland, Max Planck Pre-doctoral Research School (CMMRS) 2018. Aug. 2018.
8. Dickerson, JP and T Sandholm. *Organ Exchange: A Success Story of AI in Healthcare*. Half-day tutorial at the Conference on Artificial Intelligence (AAAI). Feb. 2016.
9. Dickerson, JP and T Sandholm. *Organ Exchange: A Success Story of AI in Healthcare*. Half-day tutorial at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS). May 2016.
10. Dickerson, JP and T Sandholm. *Organ Exchange: A Success Story of AI in Healthcare*. Half-day tutorial at the International Joint Conference on Artificial Intelligence (IJCAI). July 2016.

Invited talks

It is likely that I have not kept this up to date in recent years.

1. Dickerson, JP. *Advances in Deep Learning for Auction Design: Fairness, Robustness, and Expressiveness*. Invited talk, UCSD Halıcıoğlu Data Science Institute. Apr. 2021.
2. Dickerson, JP. *Advances in Deep Learning for Auction Design: Fairness, Robustness, and Expressiveness*. Invited talk, Harvard EconCS & Salesforce AI Research (AI for Economics Seminar). Apr. 2021.
3. Dickerson, JP. *Advances in Deep Learning for Auction Design: Fairness, Robustness, and Expressiveness*. Invited talk, Northwestern University (Theory Seminar). Mar. 2021.
4. Dickerson, JP. *AI & OR for Matching Markets in Healthcare*. Invited talk, CCC / ACM SIGAI / INFORMS Workshop on Artificial Intelligence and Operations Research. Sept. 2021.
5. Dickerson, JP. *AI Model Monitoring in Healthcare: Case Studies in US-Wide Organ Allocation*. Invited talk, NIH Biomedical Information Science and Technology Initiative (BISTI) Seminar Series. May 2021.
6. Dickerson, JP. *Building Robust Matching Markets in Healthcare*. Invited talk, AI for Social 'Good': Case Studies and Ethical Considerations, George Mason University (GMU). Sept. 2021.
7. Dickerson, JP. *Deep Learning for the Design of Fair Auctions*. Invited talk, IJCAI-PRICAI Workshop on Applied Mechanism Design (WAMD). Jan. 2021.
8. Dickerson, JP. *Designing Efficient, Fair, & Robust Platform Markets: Case Studies in Worldwide Blood Donation and Organ Exchange*. Invited talk, Center for Human-Compatible Artificial Intelligence (CHAI) at the University of California, Berkeley. Oct. 2021.
9. Dickerson, JP. *Designing Efficient, Fair, & Robust Platform Markets: Case Studies in Worldwide Blood Donation and Organ Exchange*. Invited talk, University of Washington AI Lab (WAIL). Oct. 2021.
10. Dickerson, JP. *Scalable Equilibrium Computation in Multi-agent Influence Games on Networks*. Invited talk, COMSOC International Seminar Series on Social Choice. Mar. 2021.
11. Dickerson, JP. *AI in Healthcare*. Invited Panelist on Governance and Risk Management at the ANSI Standardization Empowering AI-enabled Systems in Healthcare Coordination Workshop. Sept. 2020.
12. Dickerson, JP. *Deep Learning for the Design of Auctions and Allocation Mechanisms*. Invited talk, Adobe-Academia Workshop on Real-time Experience Optimization. Oct. 2020.
13. Dickerson, JP. *Strategies for Building Robust Matching Markets: A Case Study in Organ Exchange*. Invited talk, Columbia University (IEOR Department). Oct. 2020.
14. Dickerson, JP. *Strategies for Building Robust Organ Exchanges*. Invited talk, Digital Health Meetings, University of Montreal. Oct. 2020.
15. Dickerson, JP. *Strategies for Building Robust Organ Exchanges & Some Ideas For New Exchange Types*. Invited talk, Economics of Transplantation Workshop, Stanford University. Oct. 2020.
16. Dickerson, JP. *AI, Ethics, and Market Design*. Invited talk, Seminar Series on Artificial Intelligence, National Institute of Standards and Technology (NIST). Oct. 2019.
17. Dickerson, JP. *Diversity in Matching Markets*. Invited talk, National Science Foundation (NSF), AI Tea. Mar. 2019.
18. Dickerson, JP. *Increasing Access to Organs through Market Design and Optimization*. Invited talk, University of Glasgow. Apr. 2019.
19. Dickerson, JP. *Market Design via Machine Learning*. Invited talk, Federal Privacy R&D Interagency Working Group (IWG), Subcommittee on Networking and Information Technology Research and Development (NITRD). Dec. 2019.

20. Dickerson, JP. *Matching Algorithms for Blood Donation*. Invited talk, Simons Institute for Theoretical Computing (Platform Markets workshop, part of the Online and Matching-Based Market Design program). Sept. 2019.
21. Dickerson, JP. *Matching Market Design via Machine Learning*. Invited talk, Enterprise Modeling and Analytics, Fannie Mae. Dec. 2019.
22. Dickerson, JP. *The Diverse Cohort Selection Problem*. Invited talk, Simons Institute for Theoretical Computing (Information Design and Data Science workshop, part of the Online and Matching-Based Market Design program). Oct. 2019.
23. Dickerson, JP and A Srinivasan. *Balancing Relevance & Diversity in Online Matching*. Invited talk, 5th Google Market Algorithms Workshop (Mountain View). Feb. 2019.
24. Dickerson, JP. *Diversity in Matching Markets*. Invited talk, IBM Watson (Reasoning PIC / AI Science Reasoning Group). July 2018.
25. Dickerson, JP. *Diversity in Matching Markets*. Invited talk, Facebook (Core Data Sciences). Aug. 2018.
26. Dickerson, JP. *Diversity in Matching Markets*. Invited talk, Carnegie Mellon University (CMU). Mar. 2018.
27. Dickerson, JP. *Increasing Access to Organs through Market Design and Optimization*. Invited talk, Facebook (Core Data Sciences). Sept. 2018.
28. Dickerson, JP. *Introduction to Algorithms, Artificial Intelligence, and Predictive Analytics*. Invited talk, FTC Hearings on Competition and Consumer Protection in the 21st Century. Nov. 2018.
29. Dickerson, JP. *Using Optimization to Balance Fairness and Efficiency in Kidney Exchange*. Invited talk, American University. Nov. 2018.
30. Dickerson, JP. *Using Optimization to Balance Fairness and Efficiency in Kidney Exchange*. Invited talk, Dartmouth College. May 2018.
31. Dickerson, JP and A Srinivasan. *Better Allocation and Matching via Optimization and Machine Learning*. Invited talk, Google (Mountain View). Aug. 2018.
32. Dickerson, JP. *Better Matching Markets Through Optimization*. Invited talk, United States Naval Academy (USNA). Sept. 2017.
33. Dickerson, JP. *Better Matching Markets Through Optimization*. Invited talk, Laboratory for Telecommunication Sciences (LTS). July 2017.
34. Dickerson, JP. *Better Matching Markets Through Optimization*. Invited talk, Stanford University. May 2017.
35. Dickerson, JP. *Better Matching Markets Through Optimization*. Invited talk, University of British Columbia. Nov. 2017.
36. Dickerson, JP. *Better Matching Markets Through Optimization*. Invited talk, Duke University. Dec. 2016.
37. Dickerson, JP. *Swapping Kidneys: Better Matching Market Design via Optimization*. Invited talk, Data Science DC. Dec. 2016.
38. Dickerson, JP. *Failure-Aware Kidney Exchange*. Tsinghua University, Beijing, China. Aug. 2013.

Other publications and presentations

1. Booker, SE, R Leishman, J Musick, M Oley, T Sandholm, JP Dickerson, M Pavlakis, and V Casingal. Impact of Pre-Screening on OPTN Kidney Paired Donation Pilot Program Transplant and Refusal Rates. In: *American Transplant Congress (ATC)*. Abstract of poster. 2021.
2. Booker, SE, R Leishman, DE Stewart, T Sandholm, JP Dickerson, M Pavlakis, and V Casingal. An Early Look at the OPTN Kidney Paired Donation Pilot Program's New Priority Points Policy. In: *American Transplant Congress (ATC)*. Abstract of poster. 2021.
3. McElfresh, DC, M Curry, S Booker, D Stewart, M Stuart, R Leishman, T Sandholm, and JP Dickerson. Who Can Be Matched via Kidney Exchange? In: *American Transplant Congress (ATC)*. Abstract of poster. 2021.
4. McElfresh, DC, M Curry, S Booker, M Stuart, D Stewart, R Leishman, T Sandholm, and JP Dickerson. Improving Policy-constrained Kidney Exchange via Pre-screening. In: *American Transplant Congress (ATC)*. Abstract of poster. 2021.
5. McElfresh, DC, P Vayanos, and JP Dickerson. Robust Active Preference Elicitation for Learning Policy Priorities. In: *INFORMS Revenue Management & Pricing Workshop (oral presentation given by my student Duncan McElfresh)*. 2019.
6. Redmiles, EM, JP Dickerson, KP Gummadi, and M Mazurek. Equitable Security: Optimizing Distribution of Nudges and Resources. In: *ACM Conference on Computer and Communications Security (CCS)*. Abstract of poster. 2018.

7. Redmiles, EM, M Mazurek, and JP Dickerson. Do Users Make Rational Security Decisions? In: *Network and Distributed System Security Symposium (NDSS)*. Abstract of poster, **Best Poster Honorable Mention**. 2018.
8. Dickerson, JP. Recent Advances in Optimization and Machine Learning for Kidney Exchange. In: *INFORMS Healthcare Conference*. Invited talk. 2017.
9. Sandholm, T, G Farina, JP Dickerson, R Leishman, D Stewart, R Formica, C Thiessen, and S Kulkarni. A Novel KPD Mechanism to Increase Transplants When Some Candidates Have Multiple Willing Donors. In: *American Transplant Congress (ATC)*. Abstract of poster. 2017.
10. Dickerson, JP. Fast Optimal Clearing of Capped-Chain Barter Exchanges. In: *INFORMS Optimization Society (IOS) Conference*. 2016.
11. Dickerson, JP. FutureMatch: Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments. In: *World Congress on Game Theory (GAMES)*. 2016.
12. Dickerson, JP. Small Representations of Big Kidney Exchange Graphs. In: *INFORMS Annual Conference*. Invited talk, Healthcare Applications Society cluster. 2016.
13. Dickerson, JP. Small Representations of Big Kidney Exchange Graphs. In: *28th European Conference on Operational Research (EURO)*. Invited talk, Healthcare Logistics stream. 2016.
14. Dickerson, JP. Toward a Credit-Based Mechanism for Dynamic Kidney Exchange. In: *INFORMS Annual Conference*. Invited talk, Auctions cluster. 2016.
15. Dickerson, JP. Uncertainty in Dynamic Matching with Application to Organ Exchange. In: *INFORMS Annual Conference*. Invited talk. 2016.
16. Dickerson, JP, D Manlove, B Plaut, T Sandholm, and J Trimble. Position-Indexed Formulations for Kidney Exchange. In: *INFORMS Annual Conference*. Invited talk, Healthcare Applications Society cluster. 2016.
17. Das, S, JP Dickerson, Z Li, and T Sandholm. Competing Dynamic Matching Markets. In: *INFORMS Annual Conference*. Invited talk, Auctions cluster. 2015.
18. Das, S, JP Dickerson, Z Li, and T Sandholm. Competing Dynamic Matching Markets. In: *Conference on Economics and Computation (EC)*. Abstract of poster. 2015.
19. Dickerson, JP. Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments. In: *International Symposium on Mathematical Programming (ISMP)*. Invited talk, Life Sciences and Healthcare cluster. 2015.
20. Dickerson, JP. Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments. In: *INFORMS Healthcare Conference*. Invited talk, Health Operations & Logistics cluster. 2015.
21. Dickerson, JP. Near-optimal Stochastic Matching With Few Queries. In: *INFORMS Annual Conference*. Invited talk, Auctions cluster. 2015.
22. Dickerson, JP. The Dynamics of Kidney Exchange. In: *Production and Operations Management Society (POMS) Annual Conference*. Invited talk, Healthcare Operations Management track. 2015.
23. Erickson, LC, K Godwin, JP Dickerson, ED Thiessen, and AV Fisher. Different mechanisms for regulating sustained attention and learning in children. In: *Biennial Meeting of the Society for Research in Child Development (SRCD)*. 2015.
24. Dickerson, JP. *FutureMatch: Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments*. DB Seminar, Carnegie Mellon University, Pittsburgh, PA. Dec. 2014.
25. Dickerson, JP, AD Procaccia, and T Sandholm. Price of Fairness in Kidney Exchange. In: *World Transplant Congress (WTC)*. Abstract of poster. 2014.
26. Dickerson, JP and T Sandholm. FutureMatch: Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments. In: *INFORMS Annual Conference*. Invited talk, Auctions cluster. 2014.
27. Dickerson, JP and T Sandholm. FutureMatch: Learning to Match in Dynamic Environments. In: *World Transplant Congress (WTC)*. Abstract of poster. 2014.
28. Dickerson, JP and T Sandholm. FutureMatch: Learning to Match in Dynamic Environments. In: *Conference on Economics and Computation (EC)*. Abstract of poster. 2014.
29. Dickerson, JP and T Sandholm. Toward Multi-Organ Exchange. In: *World Transplant Congress (WTC)*. Abstract of poster. 2014.
30. Dickerson, JP, AD Procaccia, and T Sandholm. Failure-Aware Kidney Exchange. In: *INFORMS Annual Conference*. Invited talk, Auctions cluster. 2013.
31. Dickerson, JP, AD Procaccia, and T Sandholm. Optimizing Kidney Exchange with Transplant Chains: Theory and Reality. In: *American Transplant Congress (ATC)*. Abstract of poster. 2013.
32. Dickerson, JP, AD Procaccia, and T Sandholm. Results About, and Algorithms For, Robust Probabilistic Kidney Exchange Matching. In: *American Transplant Congress (ATC)*. Abstract of poster. 2013.

33. Dickerson, JP and T Sandholm. Liver and Multi-Organ Exchange. In: *INFORMS Annual Conference*. Contributed presentations. 2013.
34. Dickerson, JP and T Sandholm. Liver and Multi-Organ Exchange. In: *American Transplant Congress (ATC)*. Abstract of poster. 2013.
35. Fisher, AV, ED Thiessen, JP Dickerson, and LC Erickson. Development of Selective Sustained Attention: Conceptual and Measurement Issues. In: *Biennial Meeting of the Cognitive Development Society (CDS)*. 2013.
36. Dickerson, JP, AD Procaccia, and T Sandholm. Dynamic Matching via Weighted Myopia with Application to Kidney Exchange. In: *INFORMS Annual Conference*. Invited talk, Computational Stochastic Optimization cluster. 2012.
37. Dickerson, JP, AD Procaccia, and T Sandholm. Optimizing Kidney Exchange with Transplant Chains: Theory and Reality. In: *INFORMS Annual Conference*. Invited talk, Market Mechanisms and their Applications session. 2012.
38. Thiessen, ED, JP Dickerson, LC Erickson, and AV Fisher. Eyes as the windows of cognition: The Track-It paradigm and selective attention. In: *SRCD Themed Meeting on Developmental Methodology*. 2012.
39. Vargas-Baron, E, JP Dickerson, and V Subrahmanian. *Country Profiles on Early Childhood Development: Sub-Saharan Africa*. Booklet for the 4th International Conference on Early Childhood Development. 2009.
40. Blusewicz, K, K de Souza, JP Dickerson, B Feldman, A Gaddam, G Ganesan, C Hatch, C Hilseberg, L Kawa, K LaCurts, K Nealon, C Yu, and J Zytnick. *Classification of Perceived Emotion in Music using a Computational Model of the Auditory Cortex*. University of Maryland Gemstone Interdisciplinary Research Program Thesis. 2008.

Sponsored Research and Programs (Administered by ORA)

Values given below are best estimates; "UMD CS" refers to the dollar amount awarded to my department, while "Total" is an estimate of the total value of the award. Fellowships awarded directly to other researchers in my group are listed elsewhere, under "Advising & Mentorship."

Year(s)	Description	UMD CS	Total
2022–24	NSF Award #2150382: *REU Site: Combinatorics, Algorithms, and AI Applied to Real Problems*. PI: Bill Gasarch (UMD CS), co-PI: Dickerson.	$422,092	$422,092
2021–22	Army Research Lab (ArtIAMAS) Award #TBD *New Computational Techniques for Mitigating the Negative Impact of Indecision and Adversarial Misrepresentation in Multi-Agent / Group Decision-Making Systems*. Sole PI: Dickerson.	$100,000 (expected)	$100,000 (expected)
2021–25	NSF SCH Award #2124270 *Using Multi-Stage Learning to Prioritize Mental Health*. PI: Espy-Wilson (UMD ECE), co-PIs: Dickerson, Kelly (UMD Psychiatry), Resnik (UMD Linguistics).	~$250,000	$1,200,000
2020–22	NIST MSE Award #20126334 *Learning the Division of Labor between Technicians and Policymakers: An Open Source Toolkit & An Initial Case Study*. Sole PI: Dickerson.	$263,081	$263,081
2020-25	NSF D-ISN Award #2039862 *Discovery, Analysis, and Disruption of Illicit Narcotic Supply Networks*. PI: Raghavan (UMD Business), co-PIs: Benítez (MSU Publicy Policy & Political Science), Bjarnadóttir (UMD Business), Chandra (MSU Economics), Dickerson.	~$180,000	$999,999
2020–23	DARPA GARD Award #HR00112020007: *Repelling Evasion and Poisoning Attacks: A Principled Way Forward*. PI: Tom Goldstein (UMD CS), co-PIs: Dickerson, Furong Huang (UMD CS), David Jacobs (UMD CS), Jonathan Katz (UMD CS), Abhinav Shrivastava (UMD CS).	$3,200,000	$3,200,000

2020–22	ARPA-E DIFFERENTIATE Award #1257037: *LENS: Learning Enabled Network Synthesis*. Team led by United Technologies Research Center with PI Kunal Srivastava; UMD is a subcontractor. UMD co-PIs: Mark Fuge (UMD Mechanical Engineering), Patrick McCluskey (UMD Mechanical Engineering), Dickerson.	$207,864	$729,463
2020–21	DoD WHS Award #HQ003420F0035: *E-VERIFY: Understanding the Commercial Landscape for Insider Threat Detection*. PI: Dinesh Manocha (UMD CS), co-PI: Dickerson.	$223,353	$223,353
2019–23	NSF CAREER Award IIS-1846237: *CAREER: Scalable and Robust Dynamic Matching Market Design*. Sole PI: Dickerson.	$550,000	$550,000
2019–20	DARPA Disruptioneering Award (SI3-CMD) #S4761: *Decision Making via Hierarchy of Network Games: Algorithms, Game Theory, Artificial Intelligence, and Learning*. PI: Erik Demaine (MIT CS), co-PIs: Fotini Christia (MIT Political Science), Constantinos Daskalakis (MIT CS), Dickerson, Mohammad-Taghi HajiAghayi (UMD CS).	$400,000	$1,000,000
2019-21	NSF Award CCF-1852352: *REU Site: CAAR: Combinatorics and Algorithms Applied to Real Problems*. PI: Bill Gasarch (UMD CS), co-PI: Dickerson (*transfer from Samir Khuller*).	$360,000	$360,000
2018-22	NIH R01 Award NLM-013039-01: *HealthyMe/MiSalud Smartphone Application: Identifying Mechanisms to Engage African Americans and Hispanics in Personal Health Libraries*. PI: Cynthia Baur (UMD Public Health), co-PIs: Robert S. Gold (UMD Public Health), Neil Sehgal (UMD Public Health).	$133,146	$1,300,000
2018	NSF Award CNS-1838985: *Student Travel to the Cornell, Maryland, Max Planck Pre-doctoral Research School*. PI: Bobby Bhattacharjee (UMD CS), co-PI: Dickerson.	*Travel grant*	$49,996
2016–18	Israeli Ministry of Defense Award #4440766810: *Functional Targeting of Terror Networks: A Big Data Approach*. PI transfer from V.S. Subrahmanian (Dartmouth CS).	$9,000	$150,000

Gifts and Funded Research (Not Administered by ORA)

Year(s)	Description	UMD CS	Total
2021	Google AI for Social Good Award: *What Should I Grow Today so I Make Money Tomorrow? Using Social, Environmental, and Market Data to Support Small Farmers' Crop Planning*. PI: Dickerson.	$10,000	$10,000
2021	Google Research Scholar Award: *Fairness and Diversity in Graduate Admissions*. PI: Dickerson, Co-PI: Nicholas Mattei (Tulane CS).	$30,000	$60,000
2021	Google Cloud Credits Gift. PI: Dickerson, Co-PI: Nicholas Mattei (Tulane CS).	$10,000	$20,000
2020	AI + Medicine for High Impact (AIM-HI) Challenge Award, PI: Philip Resnik (UMD Linguistics), co-PIs: Dickerson, Carol Espy-Wilson (UMD ECE), Deanna Kelly (UMD School of Medicine).	~$25,000	$100,000
2019	Google Faculty Research Award: *AI for Efficient and Equitable Organ Allocation Policies*. PI: Dickerson, Co-PI: Aravind Srinivasan (UMD CS).	$56,639	$56,639

2019	Google Gift: *Dynamic and Scalable Matching, Query Markets, and Allocation under Complex Objective Functions*. PIs: Dickerson, Aravind Srinivasan (UMD CS).	$75,000	$75,000
2019	Google Cloud Credits Gift: PIs: Dickerson, Aravind Srinivasan (UMD CS).	$7,500	$7,500
2019	Maryland Transportation Institute Seed Grant, PI: Dickerson, Co-PIs: Aravind Srinivasan (UMD CS), Ilya Ryzhov (UMD Business).	$41,000	$50,000
2018	Smith AI in Business and Society Seed Grant, PIs: Dickerson, Ilya Ryzhov (UMD Business), Aravind Srinivasan (UMD CS).	$17,500	$20,000
2014	NSF SBIR Phase I Award #1345567. PI transfer from Tuomas Sandholm (CMU & Optimized Markets). I served as PI at Optimized Markets, Inc., for the duration of the award.	*Awarded to Optimized Markets*	$150,000

Patents

1. Sandholm, T, F Peng, and JP Dickerson. "Automated Allocation Of Media Campaign Assets To Time And Program In Digital Media Delivery Systems". US Patent #10,097,904. Continuation application filed 6/27/2017. Oct. 2018.
2. Sandholm, T, F Peng, and JP Dickerson. "Automated Allocation Of Media Campaign Assets To Time And Program In Digital Media Delivery Systems". US Patent #9,699,502. July 2017.

Teaching, Mentoring, & Advising

Courses Taught

Courses where I am lead instructor (that is, the person who designs lectures, teaches lectures, designs assignments, manages teaching assistants, assigns final grades, handles all administrative overhead, and so on):

Semester	University	Course Code	Title	Co-Instructor(s)	Size
S2022	UMD	CMSC498T	Mechanism Design	*Knittel*	11
F2021	UMD	CMSC320	Introduction to Data Science	–	300
S2021	UMD	CMSC828M	Applied Mechanism Design for Social Good	–	61
F2020	UMD	CMSC320	Introduction to Data Science	–	242
S2020	UMD	CMSC828M	Applied Mechanism Design for Social Good	–	50
F2019	UMD	CMSC320	Introduction to Data Science	–	296
F2018	UMD	CMSC641	Principles of Data Science	–	13
F2018	UMD	CMSC320	Introduction to Data Science	*Saggar*	222
S2018	UMD	CMSC828M	Applied Mechanism Design for Social Good	–	34
F2017	UMD	CMSC320	Introduction to Data Science	*Deshpande*	185
S2017	UMD	CMSC320	Introduction to Data Science	–	82
F2016	UMD	CMSC828M	Applied Mechanism Design for Social Good	–	22
F2015	CMU	15-892	Foundations of Electronic Marketplaces	*Sandholm*	12

Courses where I am an "instructor of record" but only lightly advise the "real" instructors, who are typically junior and senior undergraduate students operating via the Student Initiated Courses (STICs) program at UMD:

Semester	University	Course Code	Title	My Position	Size
S2022	UMD	CMSC389F	Reinforcement Learning	Faculty Mentor	32
S2021	UMD	CMSC389V	Ethics of Artificial Intelligence & Machine Learning	Faculty Mentor	29
F2020	UMD	CMSC389V	Ethics of Artificial Intelligence & Machine Learning	Faculty Mentor	33
S2020	UMD	CMSC389V	Ethics of Artificial Intelligence & Machine Learning	Faculty Mentor	30
S2020	UMD	CMSC389K	Full-Stack Web Development with Node.js	Faculty Mentor	60

F2019	UMD	CMSC389K	Full-Stack Web Development with Node.js	Faculty Mentor	53
S2019	UMD	CMSC389K	Full-Stack Web Development with Node.js	Faculty Mentor	59
F2018	UMD	CMSC389K	Full-Stack Web Development with Node.js	Faculty Mentor	28
S2018	UMD	CMSC389K	Full-Stack Web Development with Node.js	Faculty Mentor	28
F2017	UMD	CMSC389K	Full-Stack Web Development with Node.js	Faculty Mentor	26

Courses where I formally advise an undergraduate student on directed research:

Semester	University	Course Code	Title	My Position	Size
S2022	UMD	CMSC499A	Research with Professorial Faculty	Advisor	2
F2021	UMD	CMSC499A	Research with Professorial Faculty	Advisor	1
F2020	UMD	CMSC499A	Research with Professorial Faculty	Advisor	2
S2020	UMD	CMSC499A	Research with Professorial Faculty	Advisor	3
S2020	UMD	HACS279	Undergraduate Research in Cybersecurity	Advisor	1
F2019	UMD	CMSC499A	Research with Professorial Faculty	Advisor	3
S2019	UMD	CMSC499A	Research with Professorial Faculty	Advisor	2
F2018	UMD	CMSC499A	Research with Professorial Faculty	Advisor	3
F2018	UMD	CMSC498A	Independent Study	Advisor	1
S2018	UMD	CMSC499A	Research with Professorial Faculty	Advisor	1
F2017	UMD	CMSC499A	Research with Professorial Faculty	Advisor	2
S2017	UMD	CMSC499A	Research with Professorial Faculty	Advisor	4
F2016	UMD	CMSC499A	Research with Professorial Faculty	Advisor	1

Advising & Mentorship

Ph.D. Students

Student	University	Year(s)	Details
Saptarashmi Bandyopadhyay	UMD	2022–	Computer Science
Sharmila Duppala	UMD	2021–	Computer Science. Co-advised with Aravind Srinivasan (UMD)
Leo Tsepenekas	UMD	2021–	Computer Science. Co-advised with Aravind Srinivasan (UMD)
Sahil Verma	UW	2021–	Computer Science. Co-advised with Chirag Shah (UW)
Stephanie Allen	UMD	2020–	Mathematics. Co-advised with Steven Gabriel (UMD)
Seyed Esmaeili	UMD	2020–	Computer Science
Christine Herlihy	UMD	2020–	Computer Science
Marina Knittel	UMD	2020–	Computer Science. Co-advised with Mohammad Hajiaghayi (UMD)
Jingling Li	UMD	2020–	Computer Science
Jordan (J.K.) Terry	UMD	2020–	Computer Science
Samuel Dooley	UMD	2019–	Computer Science
Vedant Nanda	UMD	2019–	Computer Science. Co-advised with Krishna Gummadi (MPI-SWS)
Aviva Prins	UMD	2019–	Computer Science. Co-advised with Aravind Srinivasan (UMD)
Michael Curry	UMD	2018–22	Computer Science. Co-advised with Tom Goldstein (UMD)
Duncan McElfresh	UMD	2017–21	Mathematics
Candice Schumann	UMD	2016–20	Computer Science
Pan Xu	UMD	2016–19	Computer Science. Co-advised with Aravind Srinivasan (UMD)

Undergraduate Students

Undergraduate students with whom I have worked in a formal capacity (e.g., by advising them formally in guided research or via a summer internship or REU program), and with whom our work resulted in something that has been, or could be, published at the level of a top-tier workshop or higher:

Student	University	Year(s)	Project	Next Position
Davidson Cheng	Colorado College	2022–	*Summer REU*, Deep learning for auctions	
Yang Hong	Bucknell	2022–	*Summer REU*, Deep learning for auctions	
George Wei	UMass Amherst	2021–	*Summer REU*, Human and machine understanding of bias in face recognition	Meta AI Residency
J.J. Shankar	Pomona	2021–	*Summer REU*, Human and machine understanding of bias in face recognition	Fulbright (Taiwan)
Bradon Thymes	Howard	2021–	*Summer REU*, Human and machine understanding of bias in face recognition	Cornell (PhD)
Elizabeth Horishny	Hofstra	2020–	*Summer REU*, Deep learning for fair auction design	
Kevin Kuo	UMD	2020–21	*Summer REU*, Deep learning for fair auction design	CMU (PhD)
Anthony Ostuni	UMD	2020–21	*Summer REU*, Deep learning for fair auction design	UCSD (PhD)
Neehar Peri	UMD	2020–21	Defense against adversarial attacks in deep learning; differentiable economics & preference elicitation	CMU (PhD)
Aman Jaiman	UMD	2019–20	GPT-2 for political discourse	
Uro Lyi	UMD	2019–	Deep learning for matching market design	Citadel
Naveen Raman	UMD	2019–	Deep reinforcement learning for equitable and efficient rideshare	Cambridge (Churchill Scholarship) followed by CMU (PhD)
Mary Monroe	UMD	2019	Deep learning for music recommendation and prediction	Amazon (AWS)
Charles Cui	Oberlin	2019–20	*Summer REU*, active learning in healthcare	Northwestern University (PhD)
Kendra Griesman	Haverford	2019–20	*Summer REU*, active learning in healthcare	84.51°
Weiqin Wang	Penn State	2019–20	*Summer REU*, active learning in healthcare	CMU (MSc)
Tyler Will	Michigan State	2019–20	*Summer REU*, active learning in healthcare	Columbia University (PhD)
Darshan Chakrabarti	CMU	2018–	*Summer REU*, learning diversity functions, fairness in clustering	Strategic Machines, then Columbia University (PhD)
Mark "Kweku" Kwegyir-Aggrey	UMD	2018–19	Rideshare market optimization	Brown University (PhD)

Yuhao Wan	Carleton	2018–19	*Summer REU*, learning diversity functions, rideshare market optimization	University of Washington (PhD)
Joseph "J.T." Bergman	UMD	2017–19	Deep learning for Korean character recognition	MicroStrategy
Samsara Counts	GWU	2017–19	*Summer REU*, deep reinforcement learning for matching markets, diversity in matching markets	Max Planck Institute for Software Systems
Willy Lang	UMD	2017–19	diversity in matching markets	Flatiron Health
Cameron Moy	UMD	2017–18	*Summer REU*, deep reinforcement learning for matching markets	Northeastern University (PhD)
Ishaan Parikh	UMD	2017–18	ethics and AI	Robinhood
Linyi Xi	Haverford	2017–18	*Summer REU*, deep reinforcement learning for matching markets	CMU LTI (MSc)
Ayman Karim	UMD	2016–17	using sentiment and social network analysis to predict winners in WWE matches	Blend
Aditya Mithas	UMD	2016–17	deep reinforcement learning for matching markets	Google
Kevin Schechter	UMD	2016–17	prediction markets	Microsoft
Benjamin Plaut	CMU	2015–16	combinatorial optimization and kidney exchange	Stanford University (PhD)

High School Students

Student	School	Year(s)	Project	Next University
Arushi Srinivasan	Centennial High School	2021–	Approximation algorithms	
Zachary Zhao	Montgomery Blair	2019–20	Deep learning & graph neural networks for NP-hard problems such as maximum independent set (MIS) and set packing with application to kidney exchange.	University of Maryland
Naveen Durvasula	Montgomery Blair	2016–	Co-advised with Aravind Srinivasan. Mechanism design and Bayesian optimization for kidney exchange.	University of California, Berkeley

Awards & Distinctions Won By Students & Mentees

Awards below were won by students I advise (or with whom I work closely) for our joint research projects. Award types are labeled H, U, G, or O for high school, undergraduate, graduate, or other.

Year	Student	Type	Award
2022	Jessica Dai	O	NSF Graduate Research Fellowship
2022	Naveen Raman	U	Maryland Undergraduate Researcher of the Year (university-wide award)
2022	Leo Tsepenekas	G	*Ann G. Wylie Dissertation Fellowship* from UMD's Graduate School

2022	Naveen Raman	U	NSF Graduate Research Fellowship
2022	Seyed Esmaeili	G	*Outstanding Graduate Assistant Award* from UMD's Graduate School
2022	Naveen Raman	U	Churchill Scholarship ("... often considered one of the most prestigious and competitive international fellowships available to American graduate students, alongside the Marshall, Rhodes, and Mitchell scholarships")
2022	Naveen Raman	U	Finalist, CRA Outstanding Undergraduate Researcher Program
2021	Naveen Raman	U	Philip Merrill Presidential Scholars Program (university-wide award; "... honors the University of Maryland's most successful seniors ...")
2021	Neehar Peri	U	Maryland Undergraduate Researcher of the Year (university-wide award)
2021	Neehar Peri	U	Honorable Mention, CRA Outstanding Undergraduate Researcher Program
2021	Neehar Peri	U	Sujon Guha Memorial Award in Electrical Engineering ("... to be awarded to a graduating senior for the best written theses in the fields of electrical engineering or economics)
2021	Duncan McElfresh	G	CMNS Board of Visitors' Outstanding Graduate Student Award
2021	Marina Knittel	G	*Ann G. Wylie Dissertation Fellowship* from UMD's Graduate School
2021	Naveen Raman	U	Barry M. Goldwater Scholarship; arguably the most prestigious US scholarship given to undergraduates in the sciences and mathematics (won for our work on deep learning for rideshare)
2021	Naveen Durvasula	U	Barry M. Goldwater Scholarship; arguably the most prestigious US scholarship given to undergraduates in the sciences and mathematics (won for our work, joint with Prof. Aravind Srinivasan, on kidney exchange)
2021	Marina Knittel	G	ARCS Endowment Award for Computer Science
2020	Zachary Zhao	H	ACM/CSTA Cutler-Bell Prize in High School Computing
2020	Zachary Zhao	H	Semi-finalist in the 78th Regeneron Science Talent Search; RSTS is the oldest and arguably most prestigious science and mathematics competition for high school students in the US
2019	Pan Xu	G	Winner of the *Larry S. Davis Doctoral Dissertation Award*, given to the two best dissertations in the UMD Department of Computer Science annually
2019	Naveen Durvasula	H	Semi-finalist in the 78th Regeneron Science Talent Search; RSTS is the oldest and arguably most prestigious science and mathematics competition for high school students in the US
2019	Samsara Counts	U	Congress-Bundestag Youth Exchange for Young Professionals
2019	Naveen Durvasula	H	Junior Science and Humanities Regional Symposium (JSHS) oral presentation of research
2019	Naveen Durvasula	H	ACM/CSTA Cutler-Bell Prize in High School Computing
2018	Pan Xu	G	*Ann G. Wylie Dissertation Fellowship* from UMD's Graduate School
2018	Pan Xu	G	*Outstanding Graduate Assistant Award* from UMD's Graduate School

2018	Samsara Counts	U	Honorable Mention for the 2018 NCWiT Collegiate Award
2018	Samsara Counts	U	Google Lime Scholar
2017	Naveen Durvasula	H	Intel International Science and Engineering Fair (ISEF) Finalist, and won the Ashtavadhani Vidwan Ambati Subbaraya Chetty Foundation Second Award at Intel ISEF.
2016	Benjamin Plaut	U	Allen Newell Award for Excellence in Undergraduate Research

PhD Thesis Proposal & Defense Committees

PhD students for whom I have served as committee member are marked "CM"; PhD students for whom I have served as committee chair and/or formal (co-)advisor are marked "CC&A".

Student	University	Role	Proposed	Defended	Next Position
Pranav Goel	UMD	CM	2022 (Nov)	–	
Joseph Barrow	UMD	CM	–	2022	
Chen Zhu	UMD	CM	–	2022	Google Brain
Samuel Dooley	UMD	CC&A	2022	TBD	
Amin Ghiasi	UMD	CM	2021	TBD	
Avi Schwarzschild	UMD	CM	2021	TBD	
Leo Tsepenekas	UMD	CC&A	2021	TBD	
Kelsey Fulton	UMD	CM	2021	TBD	
Denis Peskov	UMD	CM	–	2021	NSF CIFellows post-doc, Princeton University
Suraj Nair	UMD	CM	2021	TBD	
Michael Curry	UMD	CC&A	2021	2022	Post-doc, University of Zurich (with Sven Seuken)
Rui Yin	UMD	CM	2021	TBD	
Jordan Terry	UMD	CC&A	2021	TBD	
Han-chin Shing	UMD	CM	2021	2021	Amazon Comprehend Medical
Kiran Javkar	UMD	CM	2021	2022	Research Scientist, Illumina
Michelle Yuan	UMD	CM	2020	2022	Applied Scientist, Amazon AWS AI
Kevin Bock	UMD	CM	2020	2022	
Mohsen Zakeri	UMD	CM	2020	2021	Post-doc, Johns Hopkins University (with Ben Langmead)
Alejandro Flores-Velazco	UMD	CM	2020	2022	Google
Hamed Saleh	UMD	CM	2020	TBD	
Hirak Sarkar	UMD	CM	–	2020	Post-doc, Harvard (with Peter Kharchenko)
Rock Stevens	UMD	CM	2020	2020	DoD
Saba Ahmadi	UMD	CM	2019	2021	Post-doc, TTIC (with Avrim Blum)
Ben Knisely	UMD	CM	2019	2021	Human Factors Engineer at Irving Burton Associates
Candice Schumann	UMD	CC&A	2019	2020	Research Scientist, Google
Duncan McElfresh	UMD	CC&A	2019	2021	Post-doc, Stanford University (VA Fellowship in Health Services Research and Development)
Shi Feng	UMD	CM	2019	2021	Post-doc, University of Chicago & Harvard University
Parsa Saadatpanah	UMD	CM	2019	2021	Comcast Labs
Ali Shafahi	UMD	CM	2019	2020	Research Scientist, Apple

Alireza Farhadi	UMD	CM	2018	2021	Post-doc, Carnegie Mellon University (with Elaine Shi)
Soheil Behnezhad	UMD	CM	2018		Assistant Professor of Computer Science, Northeastern University (one-year deferral to do a post-doc at Stanford)
Mahsa Derakhshan	UMD	CM	2018		Assistant Professor of Computer Science, Northeastern University
Micah Goldblum	UMD	CM	–	2020	Post-doc, UMD
Hadi Yami	UMD	CM	2018	2019	Microsoft
Mahyar Najibi	UMD	CM	–	2019	Waymo
Zheng Xu	UMD	CM	–	2019	Research Scientist, Google
Saeed Seddighin	UMD	CM	–	2019	Post-doc, Harvard University (sponsored by Michael Mitzenmacher)
Pan Xu	UMD	CC&A	2018	2019	Assistant Professor of Computer Science, New Jersey Institute of Technology (NJIT)
Elissa Redmiles	UMD	CM	2018	2019	Research Group Lead, Max Planck Institute for Software Systems (MPI-SWS) (one-year deferral to do a post-doc at Microsoft Research)
Faez Ahmed	UMD	CM	2018	2019	Assistant Professor of Mechanical Engineering, MIT (one-year deferral to do a post-doc at Northwestern)
Karthik A. Sankararaman	UMD	CM	2018	2019	Research Scientist, Facebook
Soham De	UMD	CM	–	2018	Research Scientist, Google DeepMind
Eric Krokos	UMD	CM	2017	2018	US Department of Defense
Zhuoshu Li	WashU	CM	2017	2018	Software Engineer, Google
Rama Padmanabhan	UMD	CM	2018	2018	Post-doc, UCSD Computer Science
Jinfeng Rao	UMD	CM	–	2018	Research Scientist, Facebook
Srijan Kumar	UMD	CM	–	2017	Post-doc, Stanford Computer Science (followed by Assistant Professor of Computer Science at Georgia Tech)
Yulu Wang	UMD	CM	–	2017	Software Engineer, Google

MSc Thesis Defense Committees

Master's students for whom I have served as committee member are marked "CM"; Master's students for whom I have served as committee chair and advisor are marked "CC&A".

Student	University	Role	Defended	Next Position
Geoffrey Moores	UMD	CM	2020	US Army

Service and Outreach

Conferences

Role	Venue
Organizer	AAAI/SIGAI Job Fair Co-Chair (at AAAI'18, '19, '20, '21)

	AAMAS Sponsorship Chair NA ('19)
Organizer (Workshops)	Workshop on Graph Learning for Industrial Applications (NeurIPS '22)
	Workshop #1 on AI & Operations Research (INFORMS, SIGAI, CCC '21)
	Workshop #2 on AI & Operations Research (INFORMS, SIGAI, CCC '22)
	Workshop on Dataset Curation and Security (at NeurIPS'20)
	GAIW: Games, Agents, and Incentives (at AAMAS'20, '21, '22)
	FAMAS: Fair Allocation in Multiagent Systems (FAMAS) (at AAMAS'19)
	EXPLORE (at AAMAS'17)
Steering Committee	Agents & Incentives in AI (AI^3) at AAMAS/ICML/IJCAI ('18)
Area Chair	AAAI (Main Track '22, '23)
	AAMAS ('22)
	EC ('22)
	NeurIPS ('21, '22)
SPC Member	AAAI (Main Track '20, '21, & Social Impact Track '20, '21)
	AAMAS ('19, '20)
	EC ('20)
	IJCAI ('21)
PC Member	AAAI ('13, '17, '18, '19)
	AAMAS ('17, '18)
	AISTATS ('17, '19)
	AI, Ethics, & Society (Main Track '18, '19, '21, '22, Student Program '19)
	COMSOC ('18, '21)
	EAAMO ('21, '22)
	EC ('17, '18, '19, '21)
	ICML ('16, '17, '18, '19, '20)
	IJCAI ('13, '16, '17, '18, '19)
	TinyToCS ('12)
PC (Workshops)	Fair AI in Finance at NeurIPS ('20)
	EXPLORE at AAMAS ('14, '15, '16, '17)
	Adversarial Reasoning in Multi-agent Systems at AAMAS ('17)
	Opinion Aggregation, Dynamics, and Elicitation (WADE) at EC ('18)
	Mechanism Design for Social Good (MD4SG) at EC ('18, '19) and ('20)
Reviewer	AAAI ('14, '16)
	AAMAS ('12, '16)
	ADT ('15)
	CPAIOR ('13)
	EC ('12)
	IJCAI ('15)
	NeurIPS ('16, '17, '18, '19, '20, '22 (Workshop Proposals))
	SODA ('17, '21)
	TARK ('17)
Session Chair	INFORMS (Invited Session, Auctions Cluster '14, '15, '16, '19, '20, '21, '22)
	INFORMS IOS ('16)
Travel Grant	AAMAS ('12, '14), AAAI ('13, '15), SoCS ('13)

Journals

Associate Editor	Journal of Artificial Intelligence Research (JAIR, 2019–2021)
Reviewer	Management Science
	Operations Research
	Journal of Artificial Intelligence Research (JAIR)
	Artificial Intelligence (AIJ)
	ACM Transactions on Economics and Computation (TEAC)
	European Journal of Operations Research (EJOR)
	International Journal of Production Research (IJPR)
	Annals of Mathematics and Artificial Intelligence (AMAI)
	Computers & Operations Research (COR)
	Mathematical Social Sciences (MSS)
	Artificial Intelligence Review (AIRE)
	ACM Transactions on Intelligent Systems and Technology (TIST)
	Science Advances

Professional Service

Elected Office	Secretary/Treasurer of ACM SIGAI (2019–2022)
Appointed Office	Labor Market Officer of ACM SIGAI (2018–2019)

University Service

AY2021–22	UMD	Department Council Member
AY2019–*Present*	UMD	Distinguished Lecture Series (DLS) Organizer
AY2019–*Present*	UMD	UMIACS Appointments, Promotions, and Tenure (APT) Committee
AY2018–*Present*	UMD	Director, High School Programming Competition
AY2016–*Present*	UMD	Artificial Intelligence Field Committee
AY2016–*Present*	UMD	High School Student Matching & Placement Committee
AY2019–20	UMD	Department Council Member
AY2019–20	UMD	Faculty Hiring Committee
AY2017–18	UMD	Diversity Committee
AY2017–19	UMD	Faculty board member, ML@UMD
AY2017–18	UMD	Faculty Hiring Committee
AY2017–18	UMD	Teaching Awards Committee
AY2016–17, 17–18	UMD	PhD Admissions Committee
2017	UMD	Judge, Daemon Dash Hackathon
AY2012–13, 13–14	CMU	Admissions Committee
2012	CMU	Visit Weekend planning committee
2012	CMU	President of Dec/5 (SCS graduate student organization)
2011, 2012	CMU	Artificial Intelligence Reading Group (AIRG) planning