Research Interests

Theoretical computer science and algorithms, optimization, theoretical machine learning.

Education

Doctor of Philosophy in Computer Science **08/2008 – 07/2013**
University of Illinois at Urbana-Champaign, Urbana, IL
Thesis title: Approximation algorithms for submodular optimization and graph problems
Thesis advisor: Chandra Chekuri

Bachelor of Science and Engineering in Computer Science **08/2004 – 05/2008**
Princeton University, Princeton, NJ
Graduated *magna cum laude*
Advisor: Robert Tarjan

Academic Positions

Assistant Professor **09/2016 – present**
Department of Computer Science
Boston University, Boston, MA

Junior Faculty Fellow **09/2017 – 06/2020**
Hariri Institute for Computing
Boston University, Boston, MA

Visiting Scholar **08/2017 – 12/2017**
Simons Institute for the Theory of Computing
University of California, Berkeley, CA

Faculty Fellow **02/2016 – 06/2016**
Alan Turing Institute for Data Science
London, UK

Assistant Professor **10/2014 – 06/2016**
Department of Computer Science
University of Warwick, Coventry, UK

Postdoctoral Researcher **08/2013 – 09/2014**
Center for Computational Intractability
Princeton University, Princeton, NJ

Employment History

Research Visitor **Spring 2013, May-June 2011**
IBM Research Almaden
Mentor: Jan Vondrak

Research Intern **Fall 2012, Summer 2011**
Toyota Technological Institute at Chicago
Mentor: Julia Chuzhoy

Research Intern **Summer 2012**
IBM Research TJ Watson
Mentor: Vishwanath Nagarajan

Software Engineering Intern **Summer 2010**
Google Inc., New York City, NY
Mentor: Martin Pal

Research Intern **Summer 2007**
Hewlett-Packard Labs
Mentor: Robert Schreiber

Honors and Awards

Alfred P. Sloan Research Fellowship in Computer Science, 2021.

NSF Early Career Development (CAREER) Award, 2018.

Chirag Foundation Graduate Fellowship in Computer Science, 2012.

University of Illinois at Urbana-Champaign Outstanding Teaching Award, 2009, 2010.

Elected to the Sigma Xi scientific research society, 2008.

Honorable Mention, CRA Outstanding Undergraduate Award, 2007.

International Chemistry Olympiads, 2002 (Tuymaada, silver medal), 2003 (IChO, bronze medal), 2004 (Mendeleev, silver medal).

President of Romania's Award for Academic Excellence, 2002, 2003, 2004.

Publications

Unless otherwise noted, authors are listed in **alphabetical order**. Co-authors that were my student or postdoc at the time are underlined.

Refereed Conference Publications

[1] Alina Ene, Huy Le Nguyen, Adrian Vladu. Adaptive Gradient Methods for Constrained Convex Optimization and Variational Inequalities. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), 2021.

[2] Alina Ene, Huy Le Nguyen, Adrian Vladu. Projection-Free Bandit Optimization with Privacy Guarantees. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), 2021.

[3] Alina Ene, Huy Le Nguyen. Parallel Algorithm for Non-Monotone DR-Submodular Maximization. In *Proceedings of the 37th International Conference on Machine Learning* (**ICML**), 2020.

[4] Naor Alaluf, Alina Ene, Moran Feldman, Huy Le Nguyen, Andrew Suh. Optimal Streaming Algorithms for Submodular Maximization with Cardinality Constraints. In *Proceedings of the 47th International Colloquium on Automata, Languages and Programming* (**ICALP**), 2020.

[5] Alina Ene, Adrian Vladu. Improved Convergence for ℓ_∞ and ℓ_1 Regression via Iteratively Reweighted Least Squares. In *Proceedings of the 36th International Conference on Machine Learning* (**ICML**), 2019.

[6] Alina Ene, Huy Le Nguyen. Towards Nearly-linear Time Algorithms for Submodular Maximization with a Matroid Constraint. In *Proceedings of the 46th International Colloquium on Automata, Languages and Programming* (**ICALP**) , 2019.

[7] Alina Ene, Huy Le Nguyen. A Nearly-linear Time Algorithm for Submodular Maximization with a Knapsack Constraint. In *Proceedings of the 46th International Colloquium on Automata, Languages and Programming* (**ICALP**) , 2019.

[8] Alina Ene, Huy Le Nguyen, Adrian Vladu. Submodular Maximization with Matroid and Packing Constraints in Parallel. In *Proceedings of the 51st ACM Symposium on Theory of Computing* **(STOC)**, 2019.

[9] Alina Ene, Huy Le Nguyen. Submodular Maximization with Nearly-optimal Approximation and Adaptivity in Nearly-linear Time. In *Proceedings of the 30th Annual ACM-SIAM Symposium on Discrete Algorithms* **(SODA)**, 2019.

[10] Sofia Maria Nikolakaki, Charalampos Mavroforakis, Alina Ene, Evimaria Terzi (in contribution order). Mining Tours and Paths in Activity Networks. In *Proceedings of the Web Conference* (**WWW**), 2018.

[11] Alina Ene, Viswanath Nagarajan, Rishi Saket. Approximation Algorithms for Stochastic k-TSP. In *Proceedings of the 37th IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science* (**FSTTCS**), 2017.

[12] Alina Ene, Huy Le Nguyen, Laszlo Vegh. Decomposable Submodular Function Minimization: Discrete and Continuous. In *Proceedings of the 30th Advances in Neural Information Processing Systems* (**NIPS**), 2017. **Spotlight presentation.**

[13] Alina Ene, Huy Le Nguyen. Constrained Submodular Maximization: Beyond $1/e$. In *Proceedings of the 57th Annual Symposium on Foundations of Computer Science* (**FOCS**), 2016.

[14] Rafael Barbosa, Alina Ene, Huy Le Nguyen, Justin Ward. A New Framework for Distributed Submodular Maximization. In *Proceedings of the 57th Annual Symposium on Foundations of Computer Science* (**FOCS**), 2016.

[15] Julia Chuzhoy, Alina Ene. On Approximating the Maximum Independent Set of Rectangles. In *Proceedings of the 57th Annual Symposium on Foundations of Computer Science* (**FOCS**), 2016.

[16] Chandra Chekuri, Alina Ene, Marcin Pilipczuk. Constant Congestion Routing of Symmetric Demands in Planar Directed Graphs. In *Proceedings of the 43rd International Colloquium on Automata, Languages and Programming* (**ICALP**), 2016.

[17] Alina Ene, Matthias Mnich, Marcin Pilipczuk, Andrej Risteski. On Routing Disjoint Paths in Bounded Treewidth Graphs. In *Proceedings of the 15th Scandinavian Symposium and Workshops on Algorithm Theory* (**SWAT**), 2016.

[18] Alina Ene, Gary Miller, Jakub Pachocki, Aaron Sidford. Routing Under Balance. In *Proceedings of the 48th ACM Symposium on Theory of Computing* (**STOC**), 2016.

[19] Anna Adamaszek, Parinya Chalermsook, Alina Ene, Andreas Wiese. Submodular Unsplittable Flow on Trees. In *Proceedings of the 18th Conference on Integer Programming and Combinatorial Optimization* (**IPCO**), 2016.

[20] Deeparnab Chakrabarty, Alina Ene, Ravishankar Krishnaswamy, Debmalya Panigrahi. Online Buy-at-Bulk Network Design. In *Proceedings of the 56th Annual Symposium on Foundations of Computer Science* (**FOCS**), 2015.

[21] Alina Ene, Huy Le Nguyen. Random Coordinate Descent Methods for Minimizing Decomposable Submodular Functions. In *Proceedings of the 32nd International Conference on Machine Learning* (**ICML**), 2015.

[22] Rafael Barbosa, Alina Ene, Huy Le Nguyen, Justin Ward. The Power of Randomization: Distributed Submodular Maximization on Massive Datasets. In *Proceedings of the 32nd International Conference on Machine Learning* (**ICML**), 2015.

[23] Alina Ene, Huy Le Nguyen. From Graph to Hypergraph Multiway Partition: Is the Single Threshold the Only Route? In *Proceedings of the 22nd European Symposium on Algorithms* (**ESA**), 2014.

[24] Alina Ene, Jan Vondrak. Hardness of Submodular Cost Allocation: Lattice Matching and a Simplex Coloring Conjecture. In *Proceedings of the 17th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems* (**APPROX**), 2014.

[25] Alina Ene, Ali Vakilian. Improved Approximation Algorithms for Degree-bounded Network Design Problems with Node Connectivity Requirements. In *Proceedings of the 46th ACM Symposium on Theory of Computing* (**STOC**), 2014.

[26] Chandra Chekuri, Alina Ene. The All-or-Nothing Flow Problem in Directed Graphs with Symmetric Demand Pairs. In *Proceedings of the 17th Conference on Integer Programming and Combinatorial Optimization* (**IPCO**), 2014.

[27] Chandra Chekuri, Alina Ene. Poly-logarithmic Approximation for Maximum Node Disjoint Paths with Constant Congestion. In *Proceedings of the 24th Annual ACM-SIAM Symposium on Discrete Algorithms* (**SODA**), 2013.

[28] Alina Ene, Jan Vondrak, Yi Wu. Local Distribution and the Symmetry Gap: Approximability of Multiway Partitioning Problems. In *Proceedings of the 24th Annual ACM-SIAM Symposium on Discrete Algorithms* (**SODA**), 2013.

[29] Chandra Chekuri, Alina Ene, Ali Vakilian. Prize-collecting Survivable Network Design in Node-weighted Graphs. In *Proceedings of the 15th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems* (**APPROX**), 2012.

[30] Chandra Chekuri, Alina Ene, Ali Vakilian. Node-weighted Network Design in Planar and Minor-closed Families of Graphs. In *Proceedings of the 39th International Colloquium on Automata, Languages and Programming* (**ICALP**), 2012.

[31] Parinya Chalermsook, Julia Chuzhoy, Alina Ene, Shi Li. Approximation Algorithms and Hardness of Integral Concurrent Flow. In *Proceedings of the 44th ACM Symposium on Theory of Computing* (**STOC**), 2012.

[32] Alina Ene, Sariel Har-Peled, Benjamin Raichel. Geometric Packing under Non-uniform Constraints. In *Proceedings of the 28th Annual ACM Symposium on Computational Geometry* **SoCG**, 2012.

[33] Chandra Chekuri, Alina Ene. Approximation Algorithms for Submodular Multiway Partition. In *Proceedings of the 52nd Annual Symposium on Foundations of Computer Science* (**FOCS**), 2011.

[34] Alina Ene, Sungjin Im, Benjamin Moseley. Fast Clustering using MapReduce. In *Proceedings of the 17th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (**KDD**), 2011. **Oral Presentation.**

[35] Chandra Chekuri, Alina Ene. Submodular Cost Allocation Problem and Applications. In *Proceedings of the 38th International Colloquium on Automata, Languages and Programming* (**ICALP**), 2011.

[36] Mohammad Hossein Bateni, Chandra Chekuri, Alina Ene, MohammadTaghi Hajiaghayi, Nitish Korula, Daniel Marx. Prize-collecting Steiner Problems on Planar Graphs. In *Proceedings of the 22nd Annual ACM-SIAM Symposium on Discrete Algorithms* (**SODA**), 2011.

[37] Chandra Chekuri, Alina Ene, Nitish Korula. Unsplittable Flow in Paths and Trees, and Column-Restricted Packing Integer Programs. In *Proceedings of the 12th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems* (**APPROX**), 2009.

[38] Alina Ene, William Horne, Nikola Milosavljevic, Prasad Rao, Robert Schreiber, Robert Tarjan. Fast Exact and Heuristic Methods for Role Minimization Problems. In Proceedings of the 13th ACM Symposium on Access Control Models and Technologies (**SACMAT**), 2008.

Journal Publications

The conference versions of these papers are listed in the above section.

[39] Chandra Chekuri, Alina Ene, Ali Vakilian. Node-Weighted Network Design in Planar and Minor-Closed Families of Graphs. *Transactions on Algorithms*, 2021.

[40] Chandra Chekuri, Alina Ene, Marcin Pilipczuk. Constant Congestion Routing of Symmetric Demands in Planar Directed Graphs. *SIAM Journal on Discrete Mathematics*, 2018.

[41] Deeparnab Chakrabarty, Alina Ene, Ravishankar Krishnaswamy, Debmalya Panigrahi. Online Buy-at-Bulk Network Design. *SIAM Journal on Computing*, 2018.

[42] Alina Ene, Sariel Har-Peled, Benjamin Raichel. Geometric Packing under Non-uniform Constraints. *SIAM Journal on Computing*, 2017.

[43] Anna Adamaszek, Parinya Chalermsook, Alina Ene, Andreas Wiese. Submodular Unsplittable Flow on Trees. *Mathematical Programming Series B*, 2017.

[44] Chandra Chekuri, Alina Ene. The All-or-Nothing Flow Problem in Directed Graphs with Symmetric Demand Pairs. *Mathematical Programming Series B*, 2015.

Manuscripts

[45] Alina Ene, Huy Le Nguyen. Adaptive and Universal Single-gradient Algorithms for Variational Inequalities. `https://arxiv.org/abs/2010.07799`, 2020.

[46] Alina Ene, Sofia Maria Nikolakaki, Evimaria Terzi. Team Formation: Striking a Balance Between Coverage and Cost. `https://arxiv.org/abs/2002.07782`, 2020.

[47] Alina Ene, Huy Le Nguyen, Adrian Vladu. A Parallel Double Greedy Algorithm for Submodular Maximization. `https://arxiv.org/abs/1812.01591`, 2018.

[48] Alina Ene, Huy Le Nguyen. A Reduction for Optimizing Lattice Submodular Functions with Diminishing Returns. `http://arxiv.org/abs/1606.08362`. 2016.

[49] Alina Ene, Nitish Korula, Ali Vakilian. Connected Domatic Packings in Node-capacitated Graphs. `http://arxiv.org/abs/1305.4308`. 2013.

[50] Alina Ene, Sariel Har-Peled, Benjamin Raichel. Fast Clustering with Lower Bounds: No Customer too Far, No Shop too Small. `http://arxiv.org/abs/1304.7318`. 2013.

Funding

Alfred P. Sloan Research Fellowship. $75,000. 2021 – 2023.

National Science Foundation (NSF). Division of Information and Intelligent Systems (IIS): Information Integration and Informatics (III). "A Primal-dual Framework for Data-mining Applications". Principal Investigator. 2019 – 2022.
`https://www.nsf.gov/awardsearch/showAward?AWD_ID=1908510`

National Science Foundation (NSF). Division of Computing and Communication Foundations (CCF). "CAREER: New Algorithms for Submodular Optimization". Principal Investigator. 2018 – 2023.
`https://www.nsf.gov/awardsearch/showAward?AWD_ID=1750333`

National Science Foundation (NSF). Division of Computing and Communication Foundations (CCF). "Continuous Perspectives on Accelerated Methods for Combinatorial Optimization". Co-principal Investigator. 2017 – 2020.
`https://www.nsf.gov/awardsearch/showAward?AWD_ID=1718342`.

Boston University Hariri Institute for Computing junior faculty fellowship. $10,000. 2017 – 2020.

Mentoring

Postdoc Mentoring

Adrian Vladu (Boston University) **09/2017 – 09/2020**
Co-supervised with Lorenzo Orecchia during the 2018-2019 academic year
First (and current) position: Assistant Professor at CNRS and Universite de Paris, France

Justin Ward (University of Warwick) **09/2014 – 07/2015**
Justin was a University of Warwick/DIMAP postdoc that I informally mentored.
First position: Research Scientist at EPFL
Current position: Lecturer (Assistant Professor equivalent) at Queen Mary University of London

Marcin Pilipczuk (University of Warwick) **09/2014 – 07/2015**
Marcin was a University of Warwick postdoc that I informally mentored.
First (and current) position: Assistant Professor at University of Warsaw, Poland

PhD Mentoring

Lei Lai (Boston University) **09/2020 – present**
Honors: Dean's Fellowship

Fabian Spah (Boston University) **09/2020 – present**
Honors: Dean's Fellowship

Andrew Suh (Boston University) **09/2019 – present**

Rafael da Ponte Barbosa (University of Warwick) **10/2014 – 02/2017**
Title of dissertation: New Algorithms for Distributed Submodular Maximization
First position: Researcher at the Federal University of Ceara, Brazil

MSc Mentoring

Erasmo Tani (Boston University) **09/2017 – 06/2019**
Co-advised with Lorenzo Orecchia
Honors: Dean's Fellowship
First position: PhD student at University of Chicago

Fabian Bode (University of Warwick) **2015 – 2016**
Title of dissertation: A Density-based Approach to Cluster Spatio-temporal Twitter Topics

Chu Chu (University of Warwick) **2015 – 2016**
Title of dissertation: An Improved Image Segmentation Method Using Data Clustering Algorithms

James Soffe (University of Warwick) **2014 – 2015**
Title of dissertation: Submodularity and its Application to Image Segmentation
Honors: Received the MSc degree with highest distinction
First position: Quantitative Analyst at HSBC Bank, London

Undergraduate Mentoring

Rachel Durrant (University of Warwick) **2015 – 2016**
Thesis title: A Comparison of Algorithms for the Minimum Cost Flow Problem
Honors: Runner-up (2nd place) for the best undergraduate research thesis award in Discrete Mathematics and Computer Science. Graduated with highest honors

Sara Jenkins (University of Warwick) **2014 – 2015**
Thesis title: Graph Partitioning Algorithms and their Applications
Honors: Runner-up (2nd place) for the best undergraduate research thesis award in Discrete Mathematics and Computer Science. Graduated with highest honors

Talks

Recent Invited Talks

University of Warwick DIMAP seminar. March 15, 2021.

Northwestern University seminar. August 14, 2020.

University of Texas at Austin seminar. February 7, 2019.

Northeastern University seminar. September 20, 2018.

Harvard University seminar. April 16, 2018.

Banff International Research Station, Banff, Canada. November 14, 2017.

Simons Institute for the Theory of Computing, University of California, Berkeley. September 13, 2017.

Simons Institute for the Theory of Computing, University of California, Berkeley. October 6, 2017.

New York Theory Day, Columbia University. April 28, 2017.

Duke University seminar. October 28, 2017.

Georgia Tech seminar. October 10, 2017.

MIT colloquium. September 19, 2017.

NII Shonan workshop. April 18, 2016.

Purdue University seminar. March 21, 2016.

University of British Columbia seminar. March 17, 2016.

Dartmouth University seminar. March 8, 2016.

International Symposium on Mathematical Programming (ISMP). July 16, 2015.

University of Edinburgh seminar. September 22, 2015.

Haussdorf Research Institute for Mathematics workshop. October 8, 2015.

Alan Turing Institute Scoping Workshop on Information Theory. December 15, 2015.

Bristol Algorithms Days Workshop. February 2, 2016.

Conference Talks

International Conference on Machine Learning (ICML), July 2020.

Foundations of Computer Science (FOCS), November 2017.

International Colloquium on Automata, Languages and Programming (ICALP), July 2016.

Foundations of Computer Science (FOCS), October 2015.

International Conference on Machine Learning (ICML), July 2015.

European Symposium on Algorithms (ESA), September 2014.

Conference on Integer Programming and Combinatorial Optimization (IPCO), June 2014.

ACM-SIAM Symposium on Discrete Algorithms (SODA), January 2013.

International Colloquium on Automata, Languages and Programming (ICALP), July 2012.

Foundations of Computer Science (FOCS), October 2011.

ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), August 2011.

International Colloquium on Automata, Languages and Programming (ICALP), July 2011.

ACM-SIAM Symposium on Discrete Algorithms (SODA), January 2011.

International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX), August 2009.

Teaching

Teaching at Boston University

Instructor for CS 531: Advanced Optimization Algorithms	Spring 2021
Instructor for CS 237: Probability in Computing	Fall 2020
Instructor for CS 531: Advanced Optimization Algorithms	Spring 2020
Instructor for CS 237: Probability in Computing	Spring 2019
Instructor for CS 591 E1: Advanced Optimization Algorithms	Fall 2018
Instructor for CS 237: Probability in Computing	Spring 2018
Instructor for CS 591 E2: Convex Optimization Algorithms	Spring 2018
Instructor for CS 237: Probability in Computing	Spring 2017
Instructor for CS 591 E2: Optimization Methods and their Applications	Fall 2016

Teaching at University of Warwick

University of Warwick, Computer Science Department

Instructor for CS 254: Algorithmic Graph Theory	Term 2, 2016
Instructor for CS 136: Discrete Mathematics and its Applications I	Term 1, 2015
Instructor for CS 131: Mathematics for Computer Science II	Term 2, 2015

Curriculum Development

I have developed the following two new courses in algorithms and optimization. The courses have been approved as permanent courses and have been added to the Boston University course catalog.

CS 531: Advanced Optimization Algorithms. The course is one of the two courses that can be used to fulfill the PhD breadth requirement in algorithms.

CS 507: Introduction to Optimization in Computing and Machine Learning. This course was developed and taught jointly with Lorenzo Orecchia (with the title CS 591 E2: Convex Optimization Algorithms). The course is aimed at advanced undergraduates and Masters students.

Service

Program Committees

PC member (reviewer) for International Conference on Machine Learning (**ICML**), 2021.

PC member (area chair) for the International Conference on Learning Representations (**ICLR**), 2021.

PC member (reviewer) for the International Conference on Artificial Intelligence and Statistics (**AISTATS**), 2021.

PC member (reviewer) for the AAAI Conference on Artifical Inteligence (**AAAI**), 2021.

PC member for the Annual ACM-SIAM Symposium on Discrete Algorithms (**SODA**), 2020.

PC member (reviewer) for the Conference on Neural Information Processing Systems (**NeurIPS**), 2020.

PC member (area chair) for the International Conference on Machine Learning (**ICML**), 2020.

PC member for Foundations of Computer Science (**FOCS**), 2019.

PC member for ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**), research track, 2019.

PC member for the International Conference on Machine Learning (**ICML**), 2019.

PC member for The Web Conference (**WWW**), 2019.

PC member for the International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (**APPROX**), 2018.

PC member for the International Conference on Machine Learning (**ICML**), 2018.

PC member for the European Symposium on Algorithms (**ESA**), 2017.

PC member for the International Conference on Machine Learning (**ICML**), 2017.

PC member for the Conference on Learning Theory (**COLT**), 2017.

PC member for the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**), research track, 2017.

PC member for the International Colloquium on Automata, Languages and Programming (**ICALP**), 2017.

PC member for the Annual ACM-SIAM Symposium on Discrete Algorithms (**SODA**), 2015.

PC member for the Workshop on Approximation and Online Algorithms (**WAOA**), 2014.

PC member for the International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (**APPROX**), 2014.

Journal Editing

Guest editor for the Transactions on Algorithms (TALG) special issue for SODA 2021, 2021.

Conference Reviewer

2021: ICALP

2020: FOCS, AAAI

2019: STOC, SODA, IPCO, SOSA

2018: STOC, FOCS, SODA, ESA, ICALP, APPROX, SoCG, COLT, ICML

2017: STOC, FOCS, SODA, ICALP, ESA, IPCO, KDD, ICML, COLT

2016: STOC, FOCS, SODA, ICALP, ESA, NeurIPS

2015: STOC, SODA, ESA, APPROX, STACS

2014: SODA, IPCO, WAOA, SPAA, STACS

2013: FOCS, SODA, ITCS, ICALP, IPCO, WAOA, FSTTCS

2012: SODA

Journal Reviewer

SIAM Journal on Computing, August 2020.

SIAM Journal on Computing, December 2017.

Algorithmica, March 2017.

Journal of Machine Learning Research, December 2016.

Algorithmica, August 2016.

ACM Transactions on Algorithms, March 2016.

SIAM Journal on Discrete Mathematics, January 2016.

Discrete Applied Mathematics, June 2014.

Discrete Applied Mathematics, December 2014.

Discrete Applied Mathematics, February 2011.

Grant Reviewer

National Science Foundation (NSF) grant panelist, 2021.

National Science Foundation (NSF) grant panelist, 2019.

National Science Foundation (NSF) grant panelist, 2018.

National Science Foundation (NSF) grant reviewer, 2018.

UK Engineering and Physical Sciences Research Council (EPSRC): grant reviewer, 2015.

Swiss National Foundation (SNSF): grant reviewer, 2015.

Patent

R. Schreiber, A. Ene, N. Milosavljevic, R. Tarjan, M. Shah. *Computer-Implemented Method for Obtaining a Minimum Biclique Cover in a Bipartite Dataset.* US Patent App. 12/350,130.