

Curriculum Vitae: Edith Elkind

Name:	Edith ELKIND	Present Appointment:	Professor
Department:	Computer Science	College:	Balliol (non-tutorial fellow)

Academic Qualifications:

PhD (Computer Science), Princeton University, USA (2005). Supervisor: Prof. Amit Sahai

MSc (Computer Science), Princeton University, USA (2002)

MA summa cum laude (Mathematics), Moscow State University, Russia (1998)

CV highlights:

- Recipient of an ERC starting grant (May 2015 – May 2020)
- Invited speaker at major international conferences:
 - 29th International Game Theory Conference (2018), plenary speaker
 - 16th Conference on Theoretical Aspects of Rationality and Knowledge (2017), plenary speaker
 - 25th International Joint Conference on Artificial Intelligence (2016), early career track
 - 21st European Conference on Artificial Intelligence (2014), frontiers of AI track
 - 13th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (2015), plenary speaker
 - 9th Conference on Logic and the Foundations of Game and Decision Theory (2010), plenary speaker
- Member of editorial boards/associate editor of leading journals in artificial intelligence research and algorithmic game theory: Journal of AI Research, AI Journal, Journal of Autonomous Agents and Multi-Agent Systems, ACM Transactions on Economics and Computation
- Member of the board of directors of the International Foundation for Autonomous Agents and Multi-agent Systems (IFAAMAS)
- Chair of major international conferences:
 - 18th International Conference on Autonomous Agents and Multiagent Systems (2019), general chair
 - 19th ACM Conference on Economics and Computation (2018), PC chair
 - 14th International Conference on Autonomous Agents and Multiagent Systems (2015), PC chair
 - 16th International Conference on Principles and Practice of Multi-Agent Systems (2013), PC chair
 - 7th International Workshop on Internet and Network Economics (2011), PC chair
- Member of the organizing team of major international conferences:
 - 18th ACM Conference on Economics and Computation (2017), tutorial chair
 - 13th International Conference on Autonomous Agents and Multiagent Systems (2014), doctoral consortium chair
 - 23th International Joint Conference on Artificial Intelligence (2013), workshop chair
- Supervisor of an award-winning PhD thesis:
2014 Victor Lesser Distinguished Dissertation Award (sponsored by the International Foundation for Autonomous Agents and Multiagent Systems), awarded to Dr Yair Zick
- Supervisor of award-winning undergraduate research at Oxford:
 - Gloucester Research Prize for the best project in Maths and Computer Science (2015), awarded to Dominik Peters
 - Microsoft Research Prize for the best Computer Science project (2016), awarded to Jakub Sliwinski

Working Experience:

- 10/2013 – now Lecturer (10/2013–12/2013), Associate Professor (01/2014–07/2016), Professor (07/2016–now), Department of Computer Science, University of Oxford, UK
- 02/2009 – 09/2013 Assistant Professor (NRF Fellow), Division of Mathematical Sciences, Nanyang Technological University, Singapore
- 07/2007 – 02/2009 Lecturer (Roberts Fellow), School of Electronics and Computer Science, University of Southampton, UK
- 02/2007 – 06/2007 Postdoctoral Researcher (Lady Davis Fellow), Department of Computer Science, Hebrew University of Jerusalem, Israel
- 08/2006 – 01/2007 Postdoctoral Researcher, Department of Computer Science, University of Liverpool, UK
- 07/2005 – 07/2006 Postdoctoral Researcher, Department of Computer Science, University of Warwick, UK

Visiting Appointments

- 08/2015 – 10/2015 Visiting Scientist, Simons Institute for the Theory of Computing (Berkeley), USA
- 05/2015 – 05/2015 Visiting Professor, Universite Toulouse 1 Capitole, France
- 05/2012 – 05/2012 Visiting Professor, Universite Paris-Dauphine, France

External Funding**PI:**

- ERC Starting Grant, **EUR 1,395,933**, May 2015–April 2020.
Project title: Algorithms for Making Complex Collective Decisions on Structured Domains (ACCORD)
- NRF (Singapore) Research Fellowship, SGD 2,618,546 \approx **EUR 1,500,000**, Aug 2009–Aug 2014.
Project title: Algorithmic Aspects of Coalitional Games.
- ESRC ES/F035845/1, **GBP 88,650**, Sep 2008–Aug 2011.
Project title: Computational Foundations of Social Choice (associated with the EUROCORES grant below).

Co-investigator/associate partner:

- Horizon 2020—work programme 2014–2015, **co-investigator**, **EUR 7,633,847**, Sep 2015–Sep 2019.
Project title: Open Digital Research Environment Toolkit for the Advancement of Mathematics.
- ESF (European Science Foundation) EUROCORES program, **associate partner**, **EUR 1,227,825**, Oct 2008–Sep 2011.
Project title: Computational Foundations of Social Choice.

Publications

Note: in computer science, the choice of corresponding author is usually not indicative of authors' relative contributions to the paper; therefore, I do not indicate for which papers I was the corresponding author. As a rule, I use non-alphabetic ordering of the authors (with my name listed last) on papers with my students; my actual contribution in such cases may vary from essentially supervisory to an equal share. My papers with non-student co-authors typically use alphabetic ordering of the authors (though sometimes some of the senior collaborators have requested to be listed last).

Books

1. * G. Chalkiadakis, E. Elkind, M. Wooldridge, Computational Aspects of Coalitional Games, Morgan & Claypool, October 2011, 168 pages

Book chapters

1. H. Aziz, F. Brandt, E. Elkind, and P. Skowron. Computational Social Choice: The First Ten Years and Beyond, 18 pages, in *Computer Science Today, volume 10000 of Lecture Notes in Computer Science (LNCS)* (eds. B. Steffen and G. Woeginger), Springer Verlag, 2017
2. E. Elkind, M. Lackner, D. Peters, Structured Preferences, 21 page, in *Trends in Computational Social Choice* (ed. U. Endriss), AI Access, 2017
3. E. Elkind, J. Rothe, Cooperative Game Theory, 50 pages, in *Economics and Computation. An Introduction to Algorithmic Game Theory, Computational Social Choice, and Fair Division* (ed. J. Rothe), Springer, 2015
4. E. Elkind, A. Slinko, Rationalizations of Voting Rules, 36 pages, in *Handbook of Computational Social Choice* (eds. F. Brandt, V. Conitzer, U. Endriss, J. Lang and A. Procaccia), Cambridge University Press, 2016
5. E. Elkind, T. Rahwan, N. Jennings, Computational Coalition Formation, 52 pages, in *Multiagent Systems* (ed. G. Weiss), MIT Press, March 2013
6. E. Elkind, E. Markakis, Game-Theoretic Foundations of Multiagent Systems, 38 pages, in *Multiagent Systems* (ed. G. Weiss), MIT Press, March 2013

Journal papers

1. A. Darmann, E. Elkind, S. Kurz, J. Lang, J. Schauer, G. Woeginger, Group Activity Selection Problem with Approval Preferences, *International Journal of Game Theory*, Online First (2017)
2. E. Elkind, P. Faliszewski, P. Skowron, A. Slinko, Properties of Multiwinner Voting Rules, *Social Choice and Welfare* 48(3):599–632, 2017
3. H. Aziz, M. Brill, V. Conitzer, E. Elkind, R. Freeman, T. Walsh: Justified Representation in Approval-Based Committee Voting, *Social Choice and Welfare* 48(2):461–485, 2017
4. I. Schlotter, P. Faliszewski, E. Elkind, Campaign Management Under Approval-Driven Voting Rules, *Algorithmica*, 77(1):84–115, 2017
5. T. Rahwan, T. Michalak, E. Elkind, M. Wooldridge, N. Jennings, An Exact Algorithm for Complete Set Partitioning, *Artificial Intelligence Journal*, 230:14–50, 2016
6. * E. Elkind, P. Faliszewski, A. Slinko, Distance Rationalizability of Voting Rules, *Social Choice and Welfare*, 45(2):345–377, 2015
7. P. Skowron, L. Yu, P. Faliszewski, E. Elkind, The Complexity of Fully Proportional Representation for Single-Crossing Electorates, *Theoretical Computer Science*, 569:43–57, 2015
8. J. Augustine, N. Chen, E. Elkind, A. Fanelli, N. Gravin, D. Shiryayev, Dynamics of Profit-Sharing Games, *Internet Mathematics*, 11(1):1–22, 2015
9. E. Elkind, J. Lang, A. Saffidine, Condorcet Winning Sets, *Social Choice and Welfare*, 44(3), 493–517, 2015
10. * Y. Zick, E. Markakis, E. Elkind, Arbitration and Stability in Cooperative Games with Overlapping Coalitions, *Journal of AI Research*, 50:847–884, 2014
11. E. Elkind, J. Orlin, On the Hardness of Finding Subsets with Equal Average, *Information Processing Letters*, 113(13):477–480, 2013
12. G. Chalkiadakis, E. Elkind, M. Wooldridge, Cooperative Game Theory: Basic Concepts and Computational Challenges, *IEEE Intelligent Systems*, 27(3):86–90, 2012
13. M. Zuckerman, P. Faliszewski, Y. Bachrach, E. Elkind, Manipulating the Quota in Weighted Voting Games, *Artificial Intelligence Journal*, 180–181:1–19, 2012

14. E. Elkind, P. Faliszewski, A. Slinko, Rationalizations of Condorcet-Consistent Rules via Distances of Hamming Type, *Social Choice and Welfare* 39(4):891–905, 2012
15. E. Elkind, P. Faliszewski, A. Slinko, Cloning in Elections: Finding The Possible Winners, *Journal of Artificial Intelligence Research* 42:529–573, 2011
16. * H. Aziz, Y. Bachrach, E. Elkind, M. Paterson, False-name Manipulations in Weighted Voting Games. *Journal of Artificial Intelligence Research* 40:57–93, 2011
17. * G. Chalkiadakis, E. Elkind, E. Markakis, M. Polukarov, N. Jennings, Exploring Stability of Overlapping Coalitions. *Journal of Artificial Intelligence Research* 39:179–216, 2010
18. E. Elkind, B. Genest, D. Peled, P. Spoletini, Quantifying the Discord: Order Discrepancies in Message Sequence Charts. *International Journal of Foundations of Computer Science* 21(2):211–233, 2010
19. * E. Elkind, L. A. Goldberg, P. W. Goldberg, M. Wooldridge, Computational Complexity of Weighted Voting Games, *Annals of Mathematics and Artificial Intelligence*, 56(2):109–131, 2009
20. D. Bosnacki, E. Elkind, B. Genest, D. Peled, On Commutativity Based Edge Lean Search, *Annals of Mathematics and Artificial Intelligence* 56(2):187–210, 2009
21. E. Elkind, L. A. Goldberg, P. W. Goldberg, M. Wooldridge, A Tractable and Expressive Class of Marginal Contribution Nets and Its Applications, *Mathematical Logic Quarterly* 55(4):362–376, 2009

Papers in refereed conferences (typical acceptance rates are 20-25%)

1. J. Gan, E. Elkind, M. Wooldridge, Stackelberg Security Games with Multiple Uncoordinated Defenders, *17th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'18)*, 2018
2. F. Jaeckle, D. Peters, E. Elkind, On Recognising Nearly Single-Crossing Preferences, *32nd Conference on Artificial Intelligence (AAAI'18)*, 2018
3. A. Igarashi, R. Izsak, E. Elkind, Cooperative Games with Bounded Dependency Degree, *32nd Conference on Artificial Intelligence (AAAI'18)*, 2018
4. H. Aziz, E. Elkind, S. Huang, M. Lackner, L. Sánchez-Fernández, P. Skowron, On the Complexity of Extended and Proportional Justified Representation, *32nd Conference on Artificial Intelligence (AAAI'18)*, 2018
5. R. Bredereck, E. Elkind, Manipulating Opinion Diffusion in Social Networks, *26th International Joint Conference on Artificial Intelligence (IJCAI'17)*, 2017
6. P. Skowron, M. Lackner, M. Brill, D. Peters, E. Elkind, Proportional Rankings, *26th International Joint Conference on Artificial Intelligence (IJCAI'17)*, 2017
7. S. Bouveret, K. Cechlarova, E. Elkind, A. Igarashi, D. Peters, Fair Division of a Graph, *26th International Joint Conference on Artificial Intelligence (IJCAI'17)*, 2017
8. H. Aziz, E. Elkind, P. Faliszewski, M. Lackner, P. Skowron, The Condorcet Principle for Multiwinner Elections: From Shortlisting to Proportionality, *26th International Joint Conference on Artificial Intelligence (IJCAI'17)*, 2017
9. A. Igarashi, R. Bredereck, E. Elkind: On Parameterized Complexity of Group Activity Selection Problems on Social Networks *16th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'17)*, 2017
10. S. Obraztsova, M. Polukarov, Z. Rabinovich, E. Elkind, Doodle Poll Games, *16th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'17)*, 2017
11. P. Skowron, E. Elkind, Social Choice Under Metric Preferences: Scoring Rules and STV, *31st Conference on Artificial Intelligence (AAAI'17)*, 2017

12. L. Sanchez Fernandez, E. Elkind, M. Lackner, N. Fernandez Garcia, J. Arias Fisteus, P. Basanta Val, P. Skowron, Proportional Justified Representation, *31st Conference on Artificial Intelligence (AAAI'17)*, 2017
13. A. Igarashi, D. Peters, E. Elkind, Group Activity Selection on Social Networks, *31st Conference on Artificial Intelligence (AAAI'17)*, 2017
14. E. Elkind, P. Faliszewski, J.-F. Laslier, P. Skowron, A. Slinko, N. Talmon, What Do Multiwinner Voting Rules Do? An Experiment Over the Two-Dimensional Euclidean Domain, *31st Conference on Artificial Intelligence (AAAI'17)*, 2017
15. E. Elkind, M. Lackner, D. Peters, Preference Restrictions in Computational Social Choice: Recent Progress, *25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, 2016
16. S. Obraztsova, Z. Rabinovich, E. Elkind, M. Polukarov, N. R. Jennings, Trembling Hand Equilibria of Plurality Voting, *25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, 2016
17. M. Brill, E. Elkind, U. Endriss, U. Grandi, Pairwise Diffusion of Preference Rankings in Social Networks, *25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, 2016
18. C. Pavlou, E. Elkind, Manipulating Citation Indices in a Social Context, *15th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'16)*, 2016
19. A. Igarashi, E. Elkind, Hedonic Games with Graph-restricted Communication, *15th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'16)*, 2016
20. E. Elkind, E. Markakis, S. Obraztsova, P. Skowron, Complexity of Finding Equilibria of Plurality Voting Under Structured Preferences, *15th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'16)*, 2016
21. D. Peters, E. Elkind, Preferences Single-Peaked on Nice Trees, *30th Conference on Artificial Intelligence (AAAI'16)*, 2016
22. E. Elkind, A. Fanelli, M. Flammini, Price of Pareto Optimality in Hedonic Games, *30th Conference on Artificial Intelligence (AAAI'16)*, 2016
23. E. Elkind, E. Markakis, S. Obraztsova, P. Skowron, Equilibria of Plurality Voting: Lazy and Truth-Biased Voters, *8th International Symposium on Algorithmic Game Theory (SAGT'15)*, 2015
24. E. Elkind, A. Ismaili, OWA-Based Extensions of the Chamberlin-Courant Rule, *4th International Conference on Algorithmic Decision Theory (ADT'15)*, 2015
25. D. Peters, E. Elkind, Simple Causes of Complexity in Hedonic Games, *24th International Joint Conference on Artificial Intelligence (IJCAI'15)*, 2015
26. E. Elkind, M. Lackner, Structure in Dichotomous Preferences, *24th International Joint Conference on Artificial Intelligence (IJCAI'15)*, 2015
27. E. Elkind, U. Grandi, F. Rossi, A. Slinko, Gibbard–Satterthwaite Games, *24th International Joint Conference on Artificial Intelligence (IJCAI'15)*, 2015
28. S. Obraztsova, E. Elkind, M. Polukarov, Z. Rabinovich, Strategic Candidacy Games with Lazy Candidates, *24th International Joint Conference on Artificial Intelligence (IJCAI'15)*, 2015
29. E. Elkind, P. Faliszewski, M. Lackner, S. Obraztsova, The Complexity of Recognizing Incomplete Single-Crossing Preferences, *29th Conference on Artificial Intelligence (AAAI'15)*, 2015
30. H. Aziz, M. Brill, V. Conitzer, E. Elkind, R. Freeman, T. Walsh, Justified Representation Under Approval-Based Rules, *29th Conference on Artificial Intelligence (AAAI'15)*, 2015
31. E. Elkind, Coalitional Games on Sparse Social Networks, *10th Conference on Web and Internet Economics (WINE'14)*, 2014
32. E. Elkind, P. Faliszewski, Recognizing 1-Euclidean Preferences: An Alternative Approach, *7th International Symposium on Algorithmic Game Theory (SAGT'14)*, 2014

33. E. Elkind, N. Shah, Voting in Irrational World: Selecting the Most Probable Without Eliminating the Impossible, *30th Conference on Uncertainty in Artificial Intelligence (UAI'14)*, 2014
34. E. Elkind, M. Lackner, On Detecting Nearly Structured Preference Profiles, *28th Conference on Artificial Intelligence (AAAI'14)*, 2014
35. E. Elkind, P. Faliszewski, P. Skowron, A Characterization of the Single-Peaked Single-Crossing Domain, *28th Conference on Artificial Intelligence (AAAI'14)*, 2014
36. E. Elkind, P. Faliszewski, P. Skowron, A. Slinko, Properties of Multiwinner Voting Rules, *13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'14)*, 2014
37. P. Skowron, L. Yu, P. Faliszewski, E. Elkind, The Complexity of Fully Proportional Representation for Single-Crossing Electorates, *6th International Symposium on Algorithmic Game Theory (SAGT'13)*, 2013
38. L. Yu, H. Chan, E. Elkind, Complexity of Multiwinner Elections for Preferences That Are Single-Peaked on a Tree, *23rd International Joint Conference on Artificial Intelligence (IJCAI'13)*, 2013
39. R. Meir, Y. Zick, E. Elkind and J. Rosenschein, Bounding the Cost of Stability in Games over Interaction Networks, *27th Conference on Artificial Intelligence (AAAI'13)*, 2013
40. D. Shiryaev, L. Yu, E. Elkind, On Elections with Robust Winners, *12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, 2013
41. S. Obraztsova, Y. Zick and E. Elkind, Tie Breaking Rules in Multi-Winner Elections, *12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, 2013
42. E. Elkind, D. Pasechnik, M. Wooldridge, Strategic Considerations in the Design of Committees, *12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, 2013
43. E. Elkind, D. Pasechnik, Y. Zick, Dynamic Weighted Voting Games, *12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, 2013
44. S. Obraztsova, E. Elkind, P. Faliszewski, A. Slinko, On Swap Distance Geometry of Voting Rules, *12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*, 2013
45. A. Darmann, E. Elkind, S. Kurz, J. Lang, J. Schauer, G. Woeginger, Group Activity Selection Problem, *8th International Workshop on Internet and Network Economics (WINE'12)*, 2012
46. E. Elkind, P. Faliszewski, A. Slinko, Clone Structures in Voters' Preferences, *13th ACM Conference on Electronic Commerce (ACM EC'12)*, 2012
47. I. Caragiannis, E. Elkind, M. Szegedy, and L. Yu, From Partial to Probabilistic Verification, *13th ACM Conference on Electronic Commerce (ACM EC'12)*, 2012
48. Y. Zick, E. Markakis, E. Elkind, Stability via LP Duality in Games with Overlapping Coalitions, *26th Conference on Artificial Intelligence (AAAI'12)*, 2012
49. Y. Zick, G. Chalkiadakis, E. Elkind, Overlapping Coalition Formation Games: Charting the Tractability Frontier, *11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12)*, 2012
50. S. Obraztsova, E. Elkind, Optimal Manipulation of Voting Rules, *11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12)*, 2012
51. E. Elkind, G. Erdelyi, Manipulation Under Voting Rule Uncertainty, *11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12)*, 2012
52. T. Rahwan, T. Michalak, E. Elkind, P. Faliszewski, M. Wooldridge, N. Jennings, Constrained Coalition Formation, *24th Conference on Artificial Intelligence (AAAI'11)*, 2011
53. I. Schlotter, E. Elkind, P. Faliszewski, Campaign Management under Approval-Driven Voting Rules, *25th Conference on Artificial Intelligence (AAAI'11)*, 2011

54. E. Iarovski, L. Yu, E. Elkind, M. Wilson, The Complexity of Safe Manipulation under Scoring Rules, *22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, 2011
55. Y. Zick, A. Skopalik, E. Elkind, Shapley Value as a Function of the Quota in Weighted Voting Games, *22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, 2011
56. S. Obraztsova, E. Elkind, On the Complexity of Voting Manipulation under Randomized Tie-Breaking, *22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, 2011
57. Y. Bachrach, E. Elkind, P. Faliszewski, Coalitional Voting Manipulation: A Game-Theoretic Perspective, *22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, 2011
58. J. Augustine, N. Chen, E. Elkind, A. Fanelli, N. Gravin, D. Shiryaev, Dynamics of Profit-Sharing Games, *22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, 2011
59. E. Elkind, J. Lang, A. Saffidine, Choosing Collectively Optimal Sets of Alternatives Based on the Condorcet Criterion, *22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, 2011
60. E. Elkind, P. Faliszewski, A. Slinko, Homogeneity and Monotonicity of Distance-Rationalizable Voting Rules, *10th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'11)*, 2011
61. Y. Zick, E. Elkind, Arbitrators in Overlapping Coalition Formation Games, *10th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'11)*, 2011
62. S. Obraztsova, E. Elkind, N. Hazon, Ties Matter: Complexity of Voting Manipulation Revisited, *10th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'11)*, 2011
63. E. Elkind, P. Faliszewski, Approximation Algorithms for Campaign Management, *6th International Workshop On Internet And Network Economics (WINE'10)*, 2010
64. N. Chen, E. Elkind, N. Gravin, F. Petrov, Frugal Mechanism Design via Spectral Techniques, *51st Annual IEEE Symposium on Foundations of Computer Science (FOCS'10)*, 2010
65. N. Hazon, E. Elkind, Complexity of Safe Strategic Voting, *3rd International Symposium on Algorithmic Game Theory (SAGT'10)*, 2010
66. E. Elkind, P. Faliszewski, A. Slinko, Good Rationalizations of Voting Rules, *24th Conference on Artificial Intelligence (AAAI'10)*, 2010
67. E. Elkind, P. Faliszewski, A. Slinko, Cloning in Elections, *24th Conference on Artificial Intelligence (AAAI'10)*, 2010
68. Y. Desmedt, E. Elkind, Equilibria of Plurality Voting with Abstentions, *11th ACM Conference on Electronic Commerce (ACM EC'10)*, 2010
69. E. Elkind, P. Faliszewski, A. Slinko, On the Role of Distances in Defining Voting Rules, *9th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'10)*, 2010
70. N. Chen, E. Elkind, N. Gravin, Refining the Cost of Cheap Labor in Set System Auctions, *5th International Workshop On Internet And Network Economics (WINE'09)*, 2009
71. E. Elkind, P. Faliszewski, A. Slinko, Swap Bribery, *2nd International Symposium on Algorithmic Game Theory (SAGT'09)*, 2009
72. Y. Bachrach, E. Elkind, R. Meir, D. Pasechnik, M. Zuckerman, J. Rothe, J. Rosenschein, The Cost of Stability and Its Application to Weighted Voting Games, *2nd International Symposium on Algorithmic Game Theory (SAGT'09)*, 2009
73. E. Elkind, P. Faliszewski, A. Slinko, On Distance Rationalizability of Some Voting Rules, *12th conference on Theoretical Aspects of Rationality and Knowledge (TARK'09)*, 2009
74. G. Chalkiadakis, E. Elkind, N. Jennings, Simple Coalitional Games with Beliefs, *21st International Joint Conference on Artificial Intelligence (IJCAI'09)*, 2009

75. E. Elkind, M. Wooldridge, Hedonic Coalition Nets, *8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'09)*, 2009
76. E. Elkind, P. Faliszewski, M. Wooldridge, Boolean Combinations of Weighted Voting Systems, *8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'09)*, 2009
77. G. Chalkiadakis, E. Elkind, M. Polukarov, N. Jennings, The Price of Democracy in Coalition Formation, *8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'09)*, 2009
78. E. Elkind, D. Pasechnik, Computing the Nucleolus of Weighted Voting Games, *20th ACM-SIAM Symposium on Discrete Algorithms (SODA'09)*, 2009
79. G. Chalkiadakis, E. Elkind, E. Markakis, N. Jennings, Overlapping Coalition Formation, *4th International Workshop On Internet And Network Economics (WINE'08)*, 2008
80. E. Elkind, G. Chalkiadakis, N. Jennings, Coalition Structures in Weighted Voting Games, *18th European Conference on Artificial Intelligence (ECAI'08)*, 2008
81. Y. Bachrach, E. Elkind, P. Faliszewski, M. Zuckerman, Manipulating the Quota in Weighted Voting Games, *23rd Conference on Artificial Intelligence (AAAI'08)*, 2008
82. E. Elkind, L. A. Goldberg, P. W. Goldberg, M. Wooldridge, On the Dimensionality of Voting Games – A Complexity-Theoretic Analysis, *23rd Conference on Artificial Intelligence (AAAI'08)*, 2008
83. E. Elkind, L. A. Goldberg, P. W. Goldberg, M. Wooldridge, A Tractable and Expressive Class of Marginal Contribution Nets and Its Applications, *7th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'08)*, 2008
84. Y. Bachrach, E. Elkind, Divide and Conquer: False-Name Manipulations in Weighted Voting Games, *7th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'08)*, 2008
85. E. Gerding, A. Byde, E. Elkind, Z. Rabinovich, N. Jennings, Approximating Mixed Nash Equilibria Using Smooth Fictitious Play in Simultaneous Auctions (short paper), *7th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'08)*, 2008
86. E. Elkind, S. Fatima, Revenue Maximization in Sequential Auctions, *3rd International Workshop On Internet And Network Economics (WINE'07)*, 2007
87. E. Elkind, B. Genest, D. Peled, P. Spoletini, Quantifying the Discord: Order Discrepancies in Message Sequence Charts, *5th International Symposium on Automated Technology for Verification and Analysis (ATVA'07)*, 2007
88. E. Elkind, L. A. Goldberg, P. W. Goldberg, M. Wooldridge, Computational Complexity of Weighted Threshold Games, *22nd Conference on Artificial Intelligence (AAAI'07)*, 2007
89. D. Bosnacki, E. Elkind, B. Genest, D. Peled, On Commutativity Based Edge Lean Search, *34th International Colloquium on Automata, Languages and Programming, Track A (ICALP(A)'07)*, 2007
90. E. Elkind, L. A. Goldberg, P. W. Goldberg, Computing Good Nash Equilibria in Graphical Games, *8th ACM Conference on Electronic Commerce (EC'07)*, 2007
91. E. Elkind, L. A. Goldberg, P. W. Goldberg, Frugality Ratios and Improved Truthful Mechanisms for Vertex Cover, *8th ACM Conference on Electronic Commerce (EC'07)*, 2007
92. E. Elkind, B. Genest, D. Peled, Detecting Races in Ensembles of Message Sequence Charts, *13th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'07)*, 2007
93. E. Elkind, Designing and Learning Optimal Finite Support Auctions, *18th ACM-SIAM Symposium on Discrete Algorithms (SODA'07)*, 2007
94. E. Elkind, B. Genest, D. Peled, H. Qu, Grey-Box Checking, *26th IFIP WG 6.1 International Conference on Formal Methods for Networked and Distributed Systems (FORTE'06)*, 2006

95. E. Elkind, L. A. Goldberg, P. W. Goldberg, Nash Equilibria in Graphical Games on Trees Revisited, *7th ACM Conference on Electronic Commerce (EC'06)*, 2006
96. E. Elkind, H. Lipmaa, Hybrid Voting Protocols and Hardness of Manipulation, *16th Annual International Symposium on Algorithms and Computation (ISAAC'05)*, 2005
97. E. Elkind, True Costs of Cheap Labor Are Hard to Measure: Edge Deletion and VCG Payments in Graphs, *6th ACM Conference on Electronic Commerce (ACM EC'05)*, 2005
98. E. Elkind, H. Lipmaa, Small Coalitions Cannot Manipulate Voting, *9th International Conference on Financial Cryptography (FC'05)*, 2005
99. E. Elkind, A. Sahai, K. Steiglitz, Frugality in Path Auctions, *15th ACM-SIAM Symposium on Discrete Algorithms (SODA'04)*, 2004
100. E. Elkind, H. Lipmaa, Interleaving Cryptography and Mechanism Design: the Case of Online Auctions, *9th International Conference on Financial Cryptography (FC'04)*, 2004

Awards:

- Best student paper award (for a joint paper with a PhD student) at 11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12), June 2012 (out of **401** eligible submissions)
- Best student paper award (for a joint paper with a PhD student) at 10th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'11), May 2011 (out of **373** eligible submissions)
- Outstanding senior PC member award, 26th Conference on Artificial Intelligence (AAAI'12), July 2012
- Best senior PC member award, 10th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'11), May 2011

Invited talks at conferences and workshops (selected):

- 29th International Game Theory Conference, plenary speaker, Stony Brook (USA), July 2018
- 37th IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS'17), plenary speaker, Kanpur (India), Dec 2017
- 16th Conference on Theoretical Aspects of Rationality and Knowledge (TARK'17), plenary speaker, Liverpool (UK), July 2017
- 25th International Joint Conference on Artificial Intelligence (IJCAI'16), early career spotlight talk, New York (USA), July 2016
- 13th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ESQARU'15), plenary speaker, Compiègne (France), July 2015
- 21st European Conference on Artificial Intelligence (ECAI'14), invited speaker in Frontiers of Artificial Intelligence track, Prague (Czech Republic), August 2014
- 9th Conference on Logic and the Foundations of Game and Decision Theory (LOFT'10), plenary speaker, Toulouse (France), July 2010
- 10th International Conference on Electronic Commerce and Web Technologies (EC-Web'09), plenary speaker, Graz (Austria), August 2009
- Workshop on Decision Making and Contest Theory, plenary speaker, Ein Gedi (Israel), January 2017
- Workshop on Algorithmic Game Theory, plenary speaker, Bonn (Germany), December 2015
- Pluridisciplinary Workshop on Game Theory, plenary speaker, Toulouse (France), November 2015
- Workshop on Challenges in Algorithmic Social Choice, Bad Belzig (Germany), October 2014

- Workshop on Games, Learning, and Markets, Microsoft Research Cambridge (UK), June 2014
- DIMAP Algorithms Day, Coventry (UK), May 2014
- Workshop on Economic and Computational Aspects of Game Theory and Social Choice, Warsaw (Poland), March 2014
- Workshop on Algorithmic Game Theory, London (UK), October 2013
- Workshop on New Trends in Mechanism Design II, Aarhus (Denmark), June 2013
- Workshop on Algorithmic, Logical and Game-theoretic Aspects of Social Choice, plenary speaker, Auckland (NZ), February 2012
- Workshop on Innovations in Algorithmic Game Theory, Jerusalem (Israel), May 2011
- IPAM Workshop on Algorithmic Game Theory, Los Angeles (USA), January 2011
- Workshop on Solution Concepts for Extensive Games, Aarhus (Denmark), June 2010
- Workshop on Algorithmic Aspects of Game Theory and Social Choice, plenary speaker, Auckland (NZ), February 2010
- Workshop on Preference Handling and Aggregation on Combinatorial Domains, plenary speaker, Paris (France), June 2009

Tutorials at international conferences and summer/winter schools:

- Computational Social Choice, 16-hours course at Universidad Carlos III de Madrid (Spain), March 2018
- Computational Social Choice, GIAN course at IIT Gandhinagar (India), Dec 2017
- Domain Restrictions in Voting: 3-hour tutorial at the COST Action IC1205 Summer School on Computational Social Choice, July 2016; 6-hour tutorial at Algorithms Winter School (Bergen, Norway), Feb 2017
- Cooperative Games in Multi-Agent Systems (joint with M. Wooldridge and G. Chalkiadakis): full-day tutorial at the International Conference on Autonomous Agents and Multiagent Systems (AAMAS), May 2009, May 2010, May 2011, June 2012; half-day tutorial at the AAAI Conference on Artificial Intelligence (AAAI), July 2010; full-day tutorial at the International Joint Conference on Artificial Intelligence (IJCAI), July 2011; half-day tutorial at 16th European Agent Systems Summer School (EASSS'14), July 2014
- Computational Complexity in Multiagent Systems (joint with E. Markakis), 4-hour tutorial at the 10th European Agent Systems Summer School (EASSS'08), May 2008

Teaching (Oxford)

- Lecturer for Advanced Data Structures and Algorithms (Part B, Hilary 2015)
- Lecturer for Algorithms and Data Structures (**new course developed on the basis of Advanced Data Structures and Algorithms**, Part A/B, Hilary 2016-2018)
- Lecturer for Computational Game Theory (**new course**, Part C/MSc/MFoCS, Hilary 2016, Michaelmas 2016-2017, joint with Michael Wooldridge)
- Class tutor for Computational Complexity (Part B, Hilary 2014)
- Class tutor for Computational Learning Theory (Part B, Michaelmas 2014, 2 groups)
- Tutor for Linear Algebra (Prelims, Balliol, Michaelmas 2014/2015)

Supervision

PhD students:

- Jiarui Gan, Oxford, Oct 2016 – (co-supervised with Michael Wooldridge)
- Dominik Peters, Oxford, Oct 2015 –
- Ayumi Igarashi, Oxford, Oct 2014 – Dec 2017, defended in February 2018
- Dmitry Shiryayev, NTU, Jan 2010 – Dec 2013, ABD (co-supervised with Sinai Robins)
- Lan Yu, NTU, Jan 2010 – Sep 2013, defended in January 2014
- Yair Zick, NTU, Jan 2010 – Dec 2013, defended in April 2014 **Received the 2014 Victor Lesser Distinguished Dissertation Award sponsored by IFAAMAS, the International Foundation for Autonomous Agents and Multiagent Systems**
- Svetlana Obraztsova, NTU, Sep 2010 – May 2012, defended in October 2012

MSc students: Chrystalla Pavlou (Oxford, May 2015 – August 2015), Maxime Godon (Oxford, May 2015 – August 2015), Jay Nanavati (Oxford, May 2016 – August 2016) James Turner (Oxford, May 2017 – August 2017)

3rd/4th year projects: Ben Pace (Oxford, Oct 2017 – now), Ioana Vasile (Oxford, Oct 2017 – now), Florian Jaeckle (Oxford, Oct 2016 – June 2017), Radu Berteanu (Oxford, Oct 2016 – June 2017), Morgan King (Oxford, Oct 2016 – June 2017), Ari Aparikyan (Oxford, Oct 2015 – June 2016), Jakub Sliwinski (Oxford, Oct 2015 – June 2016, awarded **Microsoft Research Prize** for the best Computer Science project), Stefan Cucea (Oxford, Oct 2015 – June 2016), Dominik Peters (Oxford, Oct 2014 – June 2015, awarded **Gloucester Research Prize** for the best project in Maths and Computer Science), Nursultan Khajimuratov (NTU, Aug 2013 – Dec 2013), Pierre Anthony Tirtadjaja (NTU, Jan 2012 – April 2012), Zhao Danfeng (NTU, Aug 2011 – Dec 2011), Raymond Christofer Sitorus (NTU, Jan 2011 – April 2011), Koh Hsiang Ling (NTU, Sep 2010 – Dec 2010), Kevin Hendaya (NTU, Jan 2010 – April 2010), Chen Rong (NTU, Jan 2010 – April 2010)

Service (Oxford)

Departmental/College Committees:

- Department of Computer Science, MSc Admissions Committee (2013–2015)
- Department of Computer Science, MSc Examination Board (2014–2015)
- Balliol College, Executive Committee (2016–)
- Balliol College, Library Committee (2017–)

Confirmation of DPhil Status Examinations: Ana Armas (May 2014), Yiannis Giannakopoulos (Sep 2014), Mateusz Tarkowski (June 2016), Philip Lazos (Sep 2017), Matthias Gerstgrasser (Sep 2017)

Transfer Examinations: Andrew Bate (Jan 2014), Mateusz Tarkowski (Nov 2014), Matthias Gerstgrasser (Dec 2014), Philip Lazos (Nov 2015), Joseph Bolt (Nov 2016), Francisco Marmolejo Cossio (Mar 2017), James Paulin (Oct 2017)

Outreach:

Royal Grammar School High Wycombe, outreach talk, October 2017

PROMYS Europe Summer School guest speaker, August 2017

Department of Computer Science Women in CS Day speaker, June 2017

Department of Computer Science Graduate Open Day speaker, November 2014, November 2016, November 2017

Other:

Balliol College, Selection Panel for a Career Development Fellowship (May 2017)
 Selection Panel for Associate Professorship in Machine Learning (April–May 2017)
 Selection Panel for Associate Professorship in Machine Learning (February–March 2015)
 Selection Panel for Departmental Lectureship in Multiagent Systems (May 2015)
 Balliol College, Specialist Interviewer for a Junior Research Fellowship, April 2014
 DPhil admission interviews for algorithms and information systems applicants, January 2014–2017
 MFoCS admission interviews, January 2016
 MSc, MFoCS, 3rd year and 4th year project grading: ≈ 30 projects in 2014–2017

Service (external)**Editorial boards:**

Fundamenta Informaticae, editorial board member (2013–now)
 Artificial Intelligence Journal, editorial board member (2013–2014), associate editor (2015–now)
 ACM Transactions on Economics and Computation, editorial board member (2011–now)
 Journal of AI Research, editorial board member (2009–2012), associate editor (2012–2015)
 Journal of Autonomous Agents and Multi-Agent Systems, editorial board member (2010–now)

Editorship of journal special issues:

Games and Economic Behavior, co-editor of the special issue for selected papers from FOCS/STOC/SODA'13 (to appear)
 Journal of Autonomous Agents and Multi-Agent Systems, co-editor of the special issue on computational social choice (January 2011)
 AI Magazine, co-editor of the special issue on algorithmic game theory (December 2010)

Program committee chair of international conferences:

19th ACM Conference on Economics and Computation (ACM EC 2018), 275 submissions
 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2015), 670 submissions
 16th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2013), 86 submissions
 7th International Workshop on Internet and Network Economics (WINE 2011), 105 submissions

Workshop program committee chair:

7th International Workshop on Computational Social Choice (COMSOC): 2018
 IJCAI Workshop on Social Choice and Artificial Intelligence (WSCAI): 2011
 Workshop on Cooperative Games in Multiagent Systems (CoopMAS): 2010, 2012, 2013, 2014, 2017

Senior program committee:

International Joint Conference on Artificial Intelligence (IJCAI): 2009, 2011, 2013, 2015 (area chair), 2016, 2017
 International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2010, 2011, 2014, 2016 (area chair), 2018
 AAAI Conference on Artificial Intelligence (AAAI): 2011, 2012, 2014, 2016, 2017, 2018
 ACM Conference on Economics and Computation (ACM EC): 2010, 2012, 2014, 2015, 2017
 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT): 2011

Program committee (selected):

International Conference on Autonomous Agents and Multiagent Systems (AAMAS): 2008, 2009, 2012, 2013, 2017
 AAAI Conference on Artificial Intelligence (AAAI): 2008, 2010, 2015

AAAI Senior Member Presentation Track: 2014–2018
 European Conference on Artificial Intelligence (ECAI): 2008, 2010, 2014, 2016
 Annual ACM-SIAM Symposium on Discrete Algorithms (SODA): 2013
 International Colloquium on Automata, Languages and Programming, (ICALP):
 2008 (Track A), 2013 (Track A), 2016 (Track C)
 Symposium on Simplicity in Algorithms (SOSA), 2018
 Computer Science in Russia (CSR), 2018
 International World Wide Web Conference (WWW), 2017
 ACM Conference on Economics and Computation (ACM EC): 2007–2009, 2011, 2013, 2016
 Conference on Web and Internet Economics (WINE): 2010, 2014, 2016, 2017
 International Symposium on Algorithmic Game Theory (SAGT): 2009, 2011, 2013, 2015
 International Conference on Algorithmic Decision Theory (ADT): 2015
 Conference on Theoretical Aspects of Rationality and Knowledge (TARK): 2015
 Conference on Logic and the Foundations of Game and Decision Theory (LOFT): 2012, 2014, 2016
 International Workshop on Computational Social Choice (COMSOC): 2008, 2010, 2012, 2014, 2016
 Workshop on Exploring Beyond the Worst Case in Computational Social Choice (EXPLORE): 2014–2016
 Multidisciplinary Workshop on Advances in Preference Handling (MPREF): 2008, 2010, 2012
 Workshop on Cooperative Games in Multiagent Systems (CoopMAS): 2011, 2016

Workshop/conference organization (selected):

AAMAS workshop on cooperative games in multi-agent systems (CoopMAS), May 2010, June 2012, June 2013, May 2014, May 2017
 Institute for Mathematical Sciences (Singapore) program on algorithmic game theory and computational social choice, January–March 2013 (with Ning Chen (NTU))
 Dagstuhl workshop on computational social choice, March 2012
 7th Workshop on Internet and Network Economics (WINE'11), December 2011
 IJCAI workshop on social choice and artificial intelligence, July 2011
 Dagstuhl workshop on equilibrium computation, April 2010

Other:

18th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'19), general chair
 COST Action 16228 European Network for Game Theory, management committee member
 EPSRC project “Trusted and Transparent Voting Systems”, advisory board member
 Conference on Web and Internet Economics (WINE'17), best paper committee
 British Computer Society Distinguished Dissertation committee, member (2017)
 18th ACM Conference on Economics and Computation (ACM EC'17), tutorial chair
 26th International Joint Conference on Artificial Intelligence (IJCAI'17), advisory committee
 Artificial Intelligence Journal, awards committee (2016–)
 International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS), member of the board of directors (2014–)
 IFAAMAS Victor Lesser Distinguished Dissertation Award committee: member (2013), chair (2016)
 28th Conference on Artificial Intelligence (AAAI'14), best paper committee
 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'14), doctoral consortium chair
 23rd International Joint Conference on Artificial Intelligence (IJCAI'13), workshop chair
 15th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA'12), tutorial chair

Journal/conference reviewer (selected): Journal of ACM, SIAM Journal on Computing, Journal of Computer and System Sciences, Theoretical Computer Science, Theory of Computing Systems, Discrete Applied Mathematics, Games and Economic Behavior, Social Choice and Welfare, Mathematical Social Sciences, International Journal of Game Theory, Mathematics of Operations Research, Mathematical Methods of Operations Research, Annals of Operations Research, Mathematical Programming Series A and B, European Journal of Operations Research, Operation Research Letters, STOC, FOCS, SODA, I(T)CS, ICALP, ESA, STACS, ISAAC, TARK, CCC.

Reviewer for funding agencies: National Science Center (Poland), Singapore Academic Research Council, Agence Nationale de la Recherche (ANR, France), European Research Council (ERC), Israel Science

Foundation (ISF, Israel), National Science Foundation (NSF, US), Economic and Social Sciences Research Council (ESRC, UK), Engineering and Physical Sciences Research Council (EPSRC, UK), European Science Foundation (ESF), Volkswagen Foundation (Germany). EC FP7, Austrian Science Fund (FWF, Austria), Netherlands Organisation for Scientific Research (NWO, Netherlands), Estonian Research Council (ETAG, Estonia)

Reviewer for academic publishers: Chapman & Hall/CRC (2009), Cambridge University Press (2013), MIT Press (2017)

Thesis examiner: Mateusz Tarkowski (PhD, Oxford, Dec 2017), Nhan-Tam Nguyen (PhD, University of Duesseldorf, Dec 2017), Gleb Polevoy (PhD, TU Delft, Dec 2016), Andrea Loreggia (PhD, University of Padova, Dec 2015), Jiehua Chen (PhD, TU Berlin, Dec 2015), Bo Tang (PhD, University of Liverpool, Oct 2015), Aris Filos-Ratsikas (PhD, Aarhus University, Jul 2015), Simina Branzei (PhD, Aarhus University, Apr 2015), Bart de Keijzer (PhD, VU Amsterdam, Jan 2014), Mahdi Parsa (PhD, Griffith University, Aug 2011). Hua Xia (PhD, NTU, Oct 2012), Dau Son Hoang (PhD, NTU, Apr 2012) Ezra Reznick (MSc, Hebrew University of Jerusalem, Apr 2009), Viet Le Truc (MSc, NTU, Oct 2012), Kejun Wang (MSc, NTU, Sep 2011).