Nicole Immorlica

PERSONAL INFORMATION	Microsoft One Memorial Drive Cambridge, MA 02142	*Voice:* +1 401 688 9133 *E-mail:* nicimm@gmail.com *Web:* http://www.immorlica.com

RESEARCH INTERESTS

Economics and Computation; Auction Design; Market Design; Social Networks

EDUCATION

Massachusetts Institute of Technology, Cambridge, Massachusetts.

Ph.D., June 2005
Thesis: "Computing with Strategic Agents"
Advisors: Prof. D. Karger and Prof. E. Demaine

Massachusetts Institute of Technology, Cambridge, Massachusetts.

Masters of Engineering in Computer Science, December 2001
B.Sc. in Electrical Engineering and Computer Science, June 2000
B.Sc. in Mathematics, June 2000

EMPLOYMENT HISTORY

Senior Principal Researcher, Microsoft Research (MSR), Fall 2012 – present.

Manager of the MSR New England Economics and Computation group, 2021 – present. Postdoctoral students (direct manager): Yiding Feng (Assistant Professor of Industrial Engineering and Decision Analytics at HKUST), Yannai Gonczarowski (Assistant Professor of Economics at Harvard University).

Assistant Professor, EECS, Northwestern University, Fall 2008 – Summer 2013.

Graduated students: Yorgos Askalidis (Data Scientist at Spotify), Emmanouil (Manolis) Pountourakis (Assistant Professor of Computer Science at Drexel University), Greg Stoddard (Data Scientist at The Crime Lab).

Research Fellow, Hebrew University, April 2011 – July 2011.

PostDoc, Centrum voor Wiskunde en Informatica (CWI), Fall 2007 – Fall 2008.

PostDoc, Microsoft Research Redmond, Summer 2005 – Summer 2007.

AWARDS

- ⋄ SIGecom Test of Time Award for paper *Marriage, Honesty and Stability* (co-authored with Mohammad Mahdian), 2023
- ⋄ Co-author and mentor of MSR intern Alex Wei, winner of the INFORMS Auctions & Market Design Rothkopf Junior Researcher Paper Prize, 3rd place, 2021
- ⋄ Harvard Excellence in Teaching Award, 2018
- ⋄ Sloan Fellowship, 2012
- ⋄ NSF CAREER Award, 2010
- ⋄ Microsoft New Faculty Fellowship, 2009
- ⋄ Best Student Paper Award, SODA 2005
- ⋄ National Science Foundation (NSF) Fellowship (Sept. 2002 – Sept. 2005)
- ⋄ Presidential Fellowship, MIT (Sept. 2001 – Sept. 2002)

SIGNIFICANT TALKS (2022-2023)	⋄ INFORMS Revenue Management and Pricing Section Conference keynote speaker, London, UK, 2023
	⋄ HBS Future of AI and Economics keynote speaker, Cambridge, MA, 2023
	⋄ Nobel Symposium on Social Networks invited talk, Lund, Sweden, 2023
	⋄ Market Design Workshop keynote speaker, Santiago, Chile, 2023
	⋄ Richard M. Karp Distinguished Lecture, Berkeley, CA, 2022
	⋄ Stony Brook Game Theory Festival keynote talk, Stony Brook, NY, 2022
	⋄ ACM 75th Anniversary Celebration panelist, San Francisco, CA, 2022

COMMUNITY SERVICE

⋄ Professional Committees and Boards: Council of the Game Theory Society, 2021-present; INFORMS Auctions and Market Design Section board member, 2022-present; ACM SIGecom executive committee chair, 2019-present; ACM SIGACT vice-chair, 2019-2021; member of the SIGACT Committee for the Advancement of Theoretical Computer Science (CATCS), 2017-present.

⋄ Conference Organization (past 5 years): co-organizer of MSRI semester on Mathematics and Computer Science of Market and Mechanism Design and organizer of Connections Workshop, 2023; co-organizer of Simons semester on Graph Limits and Processes on Networks: From Epidemics to Misinformation, 2022; co-organizer of the annual Marketplace Innovation Workshop, 2021-present; co-organizer of Simons semester on Matching and Online Market Design, 2019; PC co-chair of ACM Conference on Economics and Computation (EC), 2019; Highlights Beyond EC, 2018; MATCH-UP co-chair, 2017.

⋄ Associate Editor: Games and Economic Behavior (2022-present); Operations Research, Revenue Management and Market Analytics Area (2018-present); ACM Transactions on Economics and Computation (2013-present); Networks (2012-2016); Games and Economic Behavior, AGT 2013 Special Issue, guest editor; SIAM Journal on Computing, STOC 2009 Special Issue, guest editor.

⋄ Award Committee: INFORMS Revenue Management and Pricing (RMP) Section Prize Committee, 2022; SIGecom Dissertation Award, 2014, 2017, 2018 (chair).

⋄ Program Committee: ACM Conference on Electronic Commerce (EC), multiple years; Conference on Web and Internet Economics (WINE), multiple years; ACM-SIAM Symposium on Discrete Algorithms (SODA), 2008 and 2016; IEEE Foundations of Computer Science (FOCS), 2010, 2013, 2020 and 2023; International Colloquium on Automata, Languages and Programming (ICALP), 2012; ACM International Conference on Web Search and Data Mining (WSDM), 2012; ACM Symposium on Theory of Computing (STOC), 2009; European Symposium on Algorithms (ESA) 2007.

⋄ Outreach: hosted a Cambridge Science Festival booth for K-12 students, 2018 and 2019; served as a mentor for the Harvard undergraduate summer research program, Program for Research in Science and Engineering (PRISE), 2016; served as a career mentor at the SIGAI Career Networking Conference (CNC), 2016; designed and co-taught a week-long lecture series on market design at Gran Sasso Science Institute in L'Aquila, Itay (2016 and 2017), School on Game Theory in Sangli, India (2014), The Complex Systems Institute in Valparaíso, Chile (2012), Makerere University in Kampala, Uganda (2010), IPM School of Mathematics in Tehran, Iran (2008)

BOOKS, CHAPTERS AND SURVEYS

1. F. Echenique, N. Immorlica, V.V. Vazirani, (Eds.). (2023). *Online and Matching-Based Market Design.* Cambridge University Press.

2. N. Immorlica. "The Design of Everyday Markets", in *The Future of Economic Design*, Laslier JF., Moulin H., Sanver M., Zwicker W. (Eds.) , Springer 2019, pp 517-522.

3. M. Babaioff, N. Immorlica, B. Lucier, and S.M. Weinberg. *A Simple and Approximately Optimal Mechanism for an Additive Buyer*, SIGecom Exchanges 13(2), December 2014.

4. N. Immorlica. *Why I don't rob banks for a living*, ACM XRDS Crossroads, March 2011.

5. M. Babaioff, N. Immorlica, D. Kempe, and R.D. Kleinberg. *Online Auctions and Generalized Secretary Problems*, SIGecom Exchanges 7(2), June 2008.

6. N. Immorlica and A. Wirth. "Clustering with Qualitative Information", in *Constrained Clustering: Advances in Algorithms, Theory, and Applications*, S. Basu, I. Davidson, and K. Wagstaff (Eds.), Chapman & Hall/CRC Press, 2008, pages 313-328.

7. A. Andoni, M. Datar, N. Immorlica, P. Indyk, and V. Mirrokni. "Locality-sensitive hasing using stable distributions", in *Nearest Neighbor Methods in Learning and Vision: Theory and Practice*, T. Darrell, P. Indyk, and G. Shakhnarovich (Eds.), MIT Press, 2006.

JOURNAL
PUBLICATIONS

Conference versions included in list below.

1. N. Immorlica, B. Lucier, V.H. Manshadi, A. Wei. *Designing Approximately Optimal Search on Matching Platforms*, forthcoming in Management Science 2022. INFORMS Auctions & Market Design Rothkopf Junior Researcher Paper Prize, 3rd place.

2. N. Immorlica, K.A. Sankararaman, R. Schapire, and A. Slivkins. *Adversarial Bandits with Knapsacks*, Journal of the ACM 2022.

3. R. Niazadeh, J.D. Hartline, N. Immorlica, M.R. Khani, B. Lucier. *Fast Core Pricing for Rich Advertising Auctions*, Operations Research 2022.

4. G. Allon, G. Askaladis, R. Berry, N. Immorlica, K. Moon and A. Singh. *When to Be Agile: Ratings and Version Updates in Mobile Apps*, Management Science 2021.

5. N. Immorlica, B. Lucier, J. Mao, V. Syrgkanis, C. Tzamos. *Combinatorial Assortment Optimization*, ACM Transactions on Economics and Computation (TEAC) 2021.

6. M. Babaioff, N. Immorlica, B. Lucier, and M. Weinberg. *A Simple and Approximately Optimal Mechanism for an Additive Buyer*, Journal of the ACM 2020.

7. M. Babaioff, N. Immorlica, D. Kempe and R. Kleinberg. *Matroid Secretary Problems*, Journal of the ACM 2018.

8. N. Immorlica, R. Kranton, M. Manea and G. Stoddard. *Social Status in Networks*, American Economic Journal: Microeconomics 2017, **lead article**.

9. N. Immorlica and M. Mahdian. *Incentives in Large Random Two-Sided Markets*, ACM Transactions on Economics and Computation (TEAC) 2015.

10. N. Haghpanah, N. Immorlica, V. Mirrokni and K. Munagala. *Optimal Auctions with Positive Network Externalities*, ACM Transactions on Economics and Computation (TEAC) 2013.

11. N. Anari, S. Ehsani, M. Ghodsi, N. Haghpanah, N. Immorlica, H. Mahini, and V. Mirrokni. *Equilibrium Pricing with Positive Network Externalities*, Theoretical Computer Science 2013.

12. J. Hatfield, N. Immorlica, and S.D. Kominers. *Testing Substitutability*, t Games and Economic Behavior, volume 75, issue 2, July 2012, pages 639–645.

13. G. Aggarwal, A. Fiat, N. Immorlica, A. Goldberg, J. Hartline, and M. Sudan, *Derandomization of Auctions*, Games and Economic Behavior 2011.

14. C. Borgs, J. Chayes, N. Immorlica, A. Kalai, V. Mirrokni, and C. Papadimitriou, *The Myth of the Folk Theorem*, Games and Economic Behavior 2010.

15. N. Immorlica, L. Li, V. Mirrokni, and A. Schulz, *Coordination Mechanisms for Selfish Scheduling*, in Theoretical Computer Science 2009, special issue WINE.

16. N. Immorlica, M. Mahdian, and V.S. Mirrokni, *The Limitations of Cross-monotonic Cost Sharing Schemes*, in ACM Transactions on Algorithms 2008, special issue on SODA.

17. R. Bhatia, N. Immorlica, T. Kimbrel, V.S. Mirrokni, S. Naor, B. Schieber, *Traffic Engineering of Management Flows by Link Augmentations on Confluent Trees*, in Theory of Computing Systems 2008.

18. M. Hajiaghayi, N. Immorlica, and V.S. Mirrokni. *Power Optimization in Fault-Tolerant Topology Control Algorithms for Wireless Multi-hop Networks*, IEEE/ACM Transactions on Networking 2007.

19. E. D. Demaine, D. Emanuel, A. Fiat, and N. Immorlica, *Correlation clustering in general weighted graphs*, Theoretical Computer Science 2006, special issue on approximation and online algorithms.

20. Y. Bejerano, M. Smith, S. Naor, and N. Immorlica, *Efficient Location Area Planning for Personal Communication Systems*, IEEE/ACM Transactions on Networking 2006.

CONFERENCE
PUBLICATIONS

1. M. Babaioff, N. Immorlica, Y. Li, B. Lucier. Making Auctions Robust to Aftermarkets, Innovations in Theoretical Computer Science (ITCS) 2023.

2. N. Immorlica, A.M. Sztutman, R.M. Townsend. Optimal Credit Scores Under Adverse Selection, ACM Conference on Economics and Computation (EC) 2022.

3. R. Abebe, N. Immorlica, J.M. Kleinberg, B. Lucier, A. Shirali. On the Effect of Triadic Closure on Network Segregation, ACM Conference on Economics and Computation (EC) 2022.

4. M. Babaioff, R. Cole, J.D. Hartline, N. Immorlica, B. Lucier. Non-Quasi-Linear Agents in Quasi-Linear Mechanisms, Innovations in Theoretical Computer Science (ITCS) 2021.

5. N. Immorlica, I.A. Kash, B. Lucier. Buying Data over Time: Approximately Optimal Strategies for Dynamic Data-Driven Decisions, Innovations in Theoretical Computer Science (ITCS) 2021.

6. N. Immorlica, B. Lucier, V.H. Manshadi, A. Wei. Designing Approximately Optimal Search on Matching Platforms, ACM Conference on Economics and Computation (EC) 2021.

7. W. Dai Li, N. Immorlica, B. Lucier. Contract Design for Afforestation Programs, Conference on Web and Internet Economics (WINE) 2021.

8. N. Immorlica, Y. Kanoria and J. Lu. When does Competition and Costly Information Acquisition Lead to a Deadlock?, Conference on Web and Internet Economics (WINE) 2021.

9. N. Collina, N. Immorlica, K. Leyton-Brown, B. Lucier, N. Newman. Dynamic Weighted Matching with Heterogeneous Arrival and Departure Rates, Conference on Web and Internet Economics (WINE) 2020.

10. N. Immorlica, J. Mao, A. Slivkins, and S. Wu. Incentivizing Exploration with Selective Data Disclosure, ACM Conference on Economics and Computation (EC) 2020.

11. N. Immorlica, S. Singla, and B. Waggoner. Prophet Inequalities with Linear Correlations, ACM Conference on Economics and Computation (EC) 2020.

12. N. Haghtalab, N. Immorlica, B. Lucier, and J. Wang. Maximizing Welfare with Incentive-Aware Evaluation Mechanisms, International Joint Conference on Artificial Intelligence (IJCAI) 2020.

13. M. Bahrani, N. Immorlica, D. Mohan, and M. Weinberg. Asynchronous Majority Dynamics in Preferential Attachment Trees, International Colloquium on Automata, Languages, and Programming (ICALP) 2020.

14. K. Goldner, N. Immorlica, and B. Lucier. Reducing Inefficiency in Carbon Auctions with Imperfect Competition, Innovations in Theoretical Computer Science (ITCS) 2020.

15. N. Immorlica, B. Plaut, and G. Weyl. Equality of Power and Fair Public Decision-Making, Conference on Web and Internet Economics (WINE) 2019.

16. N. Immorlica, K.A. Sankararaman, R. Schapire, and A. Slivkins. Adversarial Bandits with Knapsacks, IEEE Foundations of Computer Science (FOCS) 2019.

17. N. Immorlica, J. Mao, A. Slivkins, and S. Wu. Bayesian Exploration with Heterogeneous Agents, The Web Conference 2019, selected for oral presentation.

18. N. Immorlica, J. Mao, and C. Tzamos. Diversity and Exploration in Social Learning, The Web Conference 2019.

19. L. Hu, N. Immorlica, and J. Wortman Vaughan. The Disparate Effects of Strategic Manipulation, ACM Conference on Fairness, Accountability, and Transparency (FAccT) 2019.

20. N. Immorlica, K. Ligett, and J. Ziani. *Access to Population-Level Signaling as a Source of Inequality*, ACM Conference on Fairness, Accountability, and Transparency (FAccT) 2019.

21. N. Immorlica, B. Lucier, J. Mao, V. Syrgkanis, and C. Tzamos. *Combinatorial Assortment Optimization*, Conference on Web and Internet Economics (WINE) 2018.

22. N. Immorlica and R.D. Kleinberg. *Recharging Bandits*, IEEE Foundations of Computer Science (FOCS) 2018.

23. Y. Chen, N. Immorlica, B. Lucier, V. Syrgkanis, and J. Ziani. *Optimal Data Acquisition for Statistical Estimation*, ACM Conference on Economics and Computation (EC) 2018.

24. J. Hartline, N. Immorlica, M.R. Khani, B. Lucier and R. Niazadeh. *A Faster Algoithm for Bidder-Optimal Core Points*, ACM Conference on Economics and Computation (EC) 2018.

25. N. Newman, L. Falcao-Bergquist, N. Immorlica, K. Leyton-Brown, B. Lucier, C. McIntosh, J. Quinn, R. Ssekibuule. *Kudu: Designing and Evolving an Electronic Agricultural Marketplace in Uganda*, Conference on Computing and Sustainable Societies (COMPASS) 2018.

26. D. Alabi, N. Immorlica, and A. Kalai. When Optimizing nonlinear objectives is no harder than linear objectives, Conference on Learning Theory (COLT) 2018.

27. C. Dwork, N. Immorlica, A. Kalai, and M. Leiserson. *Decoupled Classifiers for Group-Fair and Efficient Machine Learning*, ACM Conference on Fairness, Accountability, and Transparency (FAccT) 2018.

28. B. Wilder, N. Immorlica, E. Rice, and M. Tambe. *Maximizing Influence in an Unknown Social Net work*, Conference on Artificial Intelligence (AAAI) 2018.

29. E. Balkanski, N. Immorlica, and Y. Singer. *The Importance of Communities for Learning to Influence*, Conference on Neural Information Processing Systems (NIPS) 2017.

30. N. Immorlica, B. Lucier, E. Pountourakis, and S. Taggart. *Repeated Sales with Multiple Strategic Buyers*, ACM Conference on Economics and Computation (EC) 2017.

31. N. Immorlica, B. Lucier, J. Mollner, and E.G. Weyl. *Approximate Efficiency in Matching Markets*, Conference on Web and Internet Economics (WINE) 2017.

32. N. Immorlica, R.D. Kleinberg, B. Lucier, and M. Zadomighaddam. *Exponential Segregation in a Two-Dimensional Schelling Model with Tolerant Individuals*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2017.

33. Bryan Wilder, Amulya Yadav, Nicole Immorlica, Eric Rice and Milind Tambe. *Uncharted but not Uninfluenced: Influence Maximization with an Uncertain Network*, Conference on Antonomous Agents and Multiagent Sytems (AAMAS) 2017, full paper.

34. M. Feldman, N. Immorlica, B. Lucier, T. Roughgarden, and V. Syrgkanis. *The Price of Anarcy in Large Games*, ACM Symposium on the Theory of Computing (STOC) 2016.

35. N. Gravin, N. Immorlica, B. Lucier, and E. Pountourakis. *Procrastination with Variable Present Bias*, ACM Conference on Economics and Computation (EC) 2016.

36. D. Hoy, N. Immorlica, and B. Lucier. *On-Demand or Spot? Selling the cloud to risk-averse consumers*, Conference on Web and Internet Economics (WINE) 2016.

37. N. Immorlica, G. Stoddard, and V. Syrgkanis. *Social Status and Badge Design*, World Wide Web Conference (WWW) 2015.

38. H. Fu, N. Immorlica, B. Lucier, and P. Strack. *Randomization beats Second Price as a Prior-Independent Auction*, ACM Conference on Economics and Computation (EC) 2015.

39. U. Feige, M. Feldman, N. Immorlica, R. Izsak, B. Lucier, and V. Syrgkanis. *A Unifying Hierarchy of Valuations with Complements and Substitutes*, Conference on Artificial Intelligence (AAAI) 2015.

40. N. Arnosti, N. Immorlica, and B. Lucier. *The (Non)-Existence of Stable Mechanisms in Incomplete Information Environments*, Conference on Web and Internet Economics (WINE) 2015.

41. S. Dughmi, N. Immorlica, R. O'Donnell, and L. Tan. *Algorithmic Signaling of Features in Auction Design*, Symposium on Algorithmic Game Theory (SAGT) 2015.

42. M. Babaioff, N. Immorlica, B. Lucier, and M. Weinberg. *A Simple and Approximately Optimal Mechanism for an Additive Buyer*, IEEE Foundations of Computer Science (FOCS) 2014.

43. M. Feldman, N. Immorlica, B. Lucier, and M. Weinberg. *Reaching Consensus via non-Bayesian Asynchronous Learning in Social Networks*, International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX) 2014.

44. B. Rastegari, A. Condon, N. Immorlica, R. Irving, and K. Leyton-Brown. *Reasoning about optimal stable matchings under partial information*, ACM Conference on Economics and Computation (EC) 2014.

45. S. Dughmi, N. Immorlica, and A. Roth. *Constrained Signaling for Welfare and Revenue Maximization*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2014.

46. B. Rastegari, A. Condon, N. Immorlica, and K. Leyton-Brown. *Two-Sided Matching with Partial Information*, ACM Conference on Electronic Commerce (EC) 2013.

47. G. Askalidis, N. Immorlica, A. Kwanashie, D. Manlove, and E. Pountourakis. *Socially Stable Matchings in the Hospitals/Residents Problem*, Algorithms and Data Structures Symposium (WADS) 2013.

48. C. Brandt, N. Immorlica, G. Kamath and R.D. Kleinberg. *A Rigorous Analyis of One-Dimensional Schelling Segregation*, ACM Symposium on the Theory of Computing (STOC) 2012.

49. S. Chawla, N. Immorlica and B. Lucier. *On the Limits of Black-Box Reductions in Mechanism Design*, ACM Symposium on the Theory of Computing (STOC) 2012.

50. N. Immorlica, R. Kranton, and G. Stoddard. *Striving for Social Status*, ACM Conference on Electronic Commerce (EC) 2012.

51. N. Immorlica and E. Pountourakis. *On Budget-Balanced Group-Strategyproof Cost-Sharing Mechanisms*, Workshop on Internet and Network Economics (WINE) 2012.

52. N. Haghpanah, N. Immorlica, V. Mirrokni, K. Munagala. *Optimal Auctions with Positive Network Externalities*, ACM Conference on Electronic Commerce (EC) 2011. Full version in *ACM Transactions on Economics and Computation*.

53. N. Immorlica, A. Tauman Kalai, B. Lucier, A. Moitra, A. Postlewaite, and M. Tennenholtz. *Dueling Algorithms*, ACM Symposium on the Theory of Computing (STOC) 2011.

54. N. Immorlica, E. Markakis, and G. Piliouras. *Coalition Formation and Price of Anarchy in Cournot Oligopolies*, Workshop on Internet and Network Economics (WINE) 2010.

55. V. Conitzer, N. Immorlica, J. Letchford, K. Munagala, and L. Wagman. *False-name-proofness in Social Networks*, Workshop on Internet and Network Economics (WINE) 2010.

56. N. Anari, S. Ehsani, M. Ghodsi, N. Haghpanah, N. Immorlica, H. Mahini, and V. Mirrokni. *Equilibrium Pricing with Positive Network Externalities*, Workshop on Internet and Network Economics (WINE) 2010. Full version in *Theoretical Computer Science*.

57. N. Immorlica, B. Lucier, and B. Rogers. *Emergence of Cooperation in Anonymous Social Networks*, ACM Conference on Electronic Commerce (EC) 2010.

58. M.H. Bateni, M.T. Hajiaghayi, N. Immorlica, and H. Mahini. *Network Bargaining with Capacity Constraints*, International Colloquium on Automata, Languages, and Programming (ICALP) 2010.

59. R. Gomes, N. Immorlica, and V. Markakis. *Externalities in Keyword Auctions: an Empirical and Theoretical Assessment*, Workshop on Internet and Network Economics (WINE) 2009.

60. U. Feige, N. Immorlica, V. Mirrokni, and H. Nazerzadeh. *PASS Approximation: A Framework for Analyzing and Designing Heuristics*, International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX) 2009.

61. N. Chen, N. Immorlica, A. Karlin, M. Mahdian, and A. Rudra. Approximating Matches Made in Heaven, International Colloquium on Automata, Languages, and Programming (ICALP) 2009.

62. M. Babaioff, M. Dinitz, A. Gupta, N. Immorlica, and K. Talwar. *Secretary Problems: Weights and Discounts*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2009.

63. C. Borgs, J. Chayes, N. Immorlica, A. Kalai, V. Mirrokni, and C. Papadimitriou, *The Myth of the Folk Theorem*, ACM Symposium on the Theory of Computing (STOC) 2008. Full version in *Games and Economic Behavior*.

64. U. Feige, N. Immorlica, V. Mirrokni, and H. Nazerzadeh, *A Combinatorial Allocation Mechanism for Banner Advertisement with Penalties*, World Wide Web Conference (WWW) 2008.

65. N. Immorlica, A. Karlin, M. Mahdian, and K. Talwar, *Balloon popping with applications to ascending auctions*, IEEE Foundations of Computer Science (FOCS) 2007.

66. M. Babaioff, N. Immorlica, D. Kempe, R. Kleinberg, *A Knapsack Secretary Problem with Applications*, International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX) 2007.

67. N. Immorlica, J. Kleinberg, M. Mahdian, and T. Wexler, *The Role of Compatibility in the Diffusion of Technology through Social Networks*, ACM Conference on Electronic Commerce (EC) 2007.

68. C. Borgs, J. Chayes, O. Etesami, N. Immorlica, K. Jain, and M. Mahdian, *Dynamics of bid optimization in online advertisement auctions*, World Wide Web Conference (WWW) 2007.

69. M. Babaioff, N. Immorlica, and R. Kleinberg, *Matroids, Secretary Problems, and Online Mechanisms*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2007.

70. N. Immorlica, K. Jain, and M. Mahdian, *Designing Hyperlink Structures: Optimization and Game-Theoretic Questions*, International Workshop on Internet and Network Economics (WINE) 2006.

71. N. Immorlica, R. Kleinberg, and M. Mahdian, *Secretary Problems with Competing Employers*, International Workshop on Internet and Network Economics (WINE) 2006.

72. B. Dean, M. Goemans, and N. Immorlica, *Finite Termination of "Augmenting Path" Algorithms in the Presence of Irrational Problem Data*, EATCS European Symposium on Algorithms (ESA) 2006.

73. B. Dean, M. Goemans, and N. Immorlica, *The Unsplittable Stable Marriage Problem*, IFIP World Computer Congress, International Conference on Theoretical Computer Science (IFIP TCS) 2006.

74. N. Immorlica, L. Li, V. Mirrokni, and A. Schulz, *Coordination Mechanisms for Selfish Scheduling*, International Workshop on Internet and Network Economics (WINE) 2005.

75. N. Immorlica, K. Jain, M. Mahdian, and K. Talwar, *Click Fraud Resistant Methods for Learning Click-Through Rates*, International Workshop on Internet and Network Economics (WINE) 2005.

76. G. Aggarwal, A. Fiat, N. Immorlica, A. Goldberg, J. Hartline, and M. Sudan, *Derandomization of Auctions*, ACM Symposium on the Theory of Computing (STOC) 2005. Full version in *Games and Economic Behavior*.

77. C. Borgs, J. Chayes, N. Immorlica, M. Mahdian, and A. Saberi, *Multi-Unit Auctions with Budget-Constrained Bidders*, ACM Conference on Electronic Commerce (EC) 2005.

78. N. Immorlica, D. Karger, E. Nikolova, and R. Sami, *First-Price Path Auctions*, ACM Conference on Electronic Commerce (EC) 2005.

79. S. Chien and N. Immorlica, *Semantic Similarity between Search Engine Queries Using Temporal Correlation*, World Wide Web Conference (WWW) 2005.

80. R. Bhatia, N. Immorlica, T. Kimbrel, V.S. Mirrokni, S. Naor, B. Schieber, *Traffic Engineering of Management Flows by Link Augmentations on Confluent Trees*, ACM Symposium on Parallelism in Algorithms and Architectures (SPAA) 2005. Full version in *Theory of Computing Systems*.

81. N. Immorlica, M. Mahdian, and V.S. Mirrokni, *Cycle Cover with Short Cycles*, Symposium on Theoretical Aspects of Computer Science (STACS) 2005.

82. N. Immorlica, M. Mahdian, and V.S. Mirrokni, *The Limitations of Cross-monotonic Cost Sharing Schemes*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2005. Winner of the best student paper award. Full version in *ACM Transactions on Algorithms*.

83. N. Immorlica, and M. Mahdian, *Marriage, Honesty, and Stability*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2005, full version to appear in *ACM Transactions on Economics and Computation*.

84. L. Zhou, L. Zhang, F. McSherry, N. Immorlica, and S. Chien, *A First Look at Peer-to-Peer Worms: Threats and Defenses*, International Workshop on Peer-To-Peer Systems (IPTPS) 2005.

85. N. Immorlica, D. Karger, M. Minkoff,and V.S. Mirrokni. *On the Costs and Benefits of Procrastination: Approximation Algorithms for Stochastic Combinatorial Optimization Problems*, ACM-SIAM Symposium on Discrete Algorithms (SODA) 2004.

86. M. Datar, N. Immorlica, P. Indyk, and V.S. Mirrokni. *Locality-Sensitive Hashing Scheme Based on p-Stable Distributions*, Annual Symposium on Computational Geometry (SoCG) 2004.

87. E. D. Demaine and N. Immorlica *Correlation Clustering with Partial Information*, International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX) 2003. Full version in *Theoretical Computer Science*.

88. Y. Bejerano, N. Immorlica, S. Naor, and M. Smith. *Location Area Design in Cellular Networks*, ACM Annual International Conference on Mobile Computing and Networking (MOBICOM) 2003. Full version in *IEEE/ACM Transactions on Networking*.

89. M. Hajiaghayi, N. Immorlica, and V.S. Mirrokni. *Power Optimization in Fault-Tolerant Topology Control Algorithms for Wireless Multi-hop Networks*, ACM Annual International Conference on Mobile Computing and Networking (MOBICOM) 2003. Full version in *IEEE/ACM Transactions on Networking*.