Curriculum Vitae
Stephen Kobourov

Department of Computer Science, School of Computation, Information and Technology
Technical University Munich, 74076 Heilbronn, Germany
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Education

2000 PhD Computer Science, Johns Hopkins University

1997 MS Computer Science, Johns Hopkins University

1995 BS Computer Science and Mathematics (double major); Classics (minor)
Summa Cum Laude, Dartmouth College

Professional Experience

2024 – Professor, Chair of Efficient Algorithms, Computer Science, Technical University Munich

2024 – Emeritus Professor, Computer Science, University of Arizona

2012 – 2024 Professor, Computer Science, University of Arizona

2006 – 2012 Associate Professor, Computer Science, University of Arizona

2000 – 2006 Assistant Professor, Computer Science, University of Arizona

2015 – 2016 Fulbright Distinguished Chair, Charles University, Prague, Czech Republic

2011 – 2012 Alexander von Humboldt Fellow, Universität Tübingen, Germany

2008 – 2009 Research Scientist, AT&T Research Labs, Florham Park, New Jersey

2006 – 2007 Fulbright Scholar, Computer Science, University of Botswana

Honors and Awards

- Best Paper Award, 17th IEEE Pacific Visualization Symposium (PACIFICVIS), 2024
- Best Paper Award, 32nd International Symposium on Graph Drawing and Network Visualization (GD), 2024
- Best Paper Award, 48th Intl. Conference on Current Trends in Theory and Practice of Computer Science, 2023
- Galileo Circle Fellowship, College of Science, University of Arizona, 2022
- Distinguished Student Mentoring Award, College of Science, University of Arizona, 2021
- Outstanding Faculty Research Award, Dept. of Computer Science, University of Arizona, 2021
- Outstanding Faculty Service Award, Dept. of Computer Science, University of Arizona, 2021
- Best Paper Award, 28th International Symposium on Graph Drawing and Network Visualization, 2020
- Most Influential Paper Award, IEEE VISSOFT, 2019
- Best Paper Award, 27th International Symposium on Graph Drawing and Network Visualization, 2019
- Best Paper Award, 13th International Conference and Workshops on Algorithms and Computation, 2018
- Best Paper Award, 25th International Symposium on Graph Drawing and Network Visualization, 2017
- Fulbright Distinguished Chair, US Department of State, 2015-2016
- Outstanding Faculty Research Award, Dept. of Computer Science, University of Arizona, 2015
- Humboldt Research Fellow, Alexander von Humboldt Foundation, Germany 2011-2014
- Outstanding Faculty Teaching Award, Dept. of Computer Science, University of Arizona, 2014
- Best Paper Award, 22nd International Symposium on Algorithms and Computation (ISAAC), 2011
- Fulbright Scholar, US Department of State, 2006-2007
- National Science Foundation CAREER Award, 2005-2011
- Fred Demerritte Graduate Studies Fellowship, Johns Hopkins University, 1995-1998
- Brainerd Memorial Scholarship (full undergraduate studies scholarship), Dartmouth College, 1992-95

Refereed Journal Publications

1. M. Oddo, R. Smith, S. Kobourov, T. Munzner, "Visualization Tasks for Unlabeled Graphs," *IEEE Transactions on Visualization and Computer Graphics*, 2026.
2. K. Smelser, K. Gunaratne, J. Miller, S. Kobourov, "How Scale Breaks 'Normalized Stress' and KL Divergence: Rethinking Quality Metrics", *IEEE Transactions on Visualization and Computer Graphics*, 2026.
3. Y. Ji, T. Brand, J. Miller, P. Zhang, S. Kobourov, Y. Hu, "Visualizing High-Dimensional Graph Embeddings via Informed Multi-View Projections," *IEEE Transactions on Visualization and Computer Graphics*, 2026.

4. A. Dobler, S. Kobourov, D. Mondal, M. Nöllenburg, "Representing Hypergraphs by Point-Line Incidences", *Discrete Mathematics & Theoretical Computer Science*, 2026
5. K. Gunaratne, J. Miller, S. Kobourov, "Class Angular Distortion Index for Dimensionality Reduction," *Computer Graphics Forum (CGF)*, 2026.
6. J. Miller, M. Wallinger, L. Felder, T. Brand, H. Förster, J. Zink, C. Chen, S. Kobourov, "Exploring MLLMs Perception of Network Visualization Principles", *IEEE Transactions on Visualization and Computer Graphics*, 2026.
7. M. Wallinger, J. Miller, A. Maftei, S. Kobourov, "Quantitative Metrics for Edge Bundling of Network Visualizations," *Computer Graphics Forum (CGF)*, 2026.
8. L. Felder, J. Miller, M. Wallinger, S. Kobourov, C. Chen, "RETRACE: Interactive Visualizations for Reasoning Traces of Large Reasoning Models," *Computer Graphics Forum (CGF)*, 2026.
9. S. Kobourov, M. Loffler, F. Montecchiani, M. Pilipczuk, I. Rutter, R. Seidel, and M. Sorge, "The Influence of Dimensions on the Complexity of Computing Decision Trees," *Artificial Intelligence Journal (AIJ)*, 2025.
10. W. Evans, K. Koeck, S. Kobourov, "Visualization of Bipartite Graphs in Limited Window Size," *Acta Informatica*, 2025.
11. M. Oddo, S. Kobourov, T. Munzner, "The Census-Stub Graph Invariant Descriptor," *IEEE Transactions on Visualization and Computer Graphics*, 2025.
12. H. Förster, F. Klesen, T. Dwyer, P. Eades, S. Hong, S. Kobourov, G. Liotta, K. Misue, F. Montecchiani, A. Pastukhov, F. Schreiber, "GraphTrials: Visual Proofs of Graph Properties", *IEEE Transactions on Visualization and Computer Graphics*, 2025.
13. J. Miller, D. Bhatia, S. Kobourov, H. Purchase, "Euclidean, Spherical and Hyperbolic Networks: An Empirical Study of Matching Network Structure to Best Visualizations," *Computer Graphics Forum*, 2025.
14. M. Aichem, K. Klein, S. Kobourov, F. Schreiber, "De-emphasise, Aggregate, and Hide: A Study of Interactive Visual Transformations for Group Structures in Network Visualisations," *IEEE Transactions on Visualization and Computer Graphics*, 2025.
15. J. Miller, D. Bhatia, S. Kobourov, "State of the Art of Graph Visualization in non-Euclidean Spaces" *Computer Graphics Forum*, 2024.
16. S. Feyer, B. Pinaud, S. Kobourov, N. Birch, M. Krone, A. Kerren, M. Behrisch, F. Schreiber, K. Klein, "2D, 2.5D, or 3D? An Exploratory Study on Multilayer Network Visualisations in Virtual Reality," *IEEE Transactions on Visualization and Computer Graphics*, 2025.
17. K. Gray, M. Li, R. Ahmed, K. Rahman, A. Azad, K. Börner, "Scalable Methods for Readable Tree Layouts," *IEEE Transactions on Visualization and Computer Graphics*, 2024.
18. R. Ahmed, P. Angelini, M. Bekos, G. Di Battista, M. Kaufmann, P. Kindermann, S. Kobourov, M. Nöllenburg, A. Symvonis, A. Villdieu, M. Wallinger, "Splitting Vertices in 2-Layer Graph Drawings," *IEEE Computer Graphics and Applications*, 2023.
19. M. Conroy, C. Gillmann, F. Harvey, T. Mchedlidze, S. Fabrikant, F. Windhager, G. Scheuermann, S. Weingart, T. Tangherlini, C. Warren, M. Rehbein, K. Borner, K. Elo, S. Jäncke, A. Kerren, M. Nöllenburg, T. Dwyer, O. Eide, S. Kobourov, G. Betz, "Uncertainty in Humanities Network Visualization", *Frontiers in Communication*, 2023.
20. R. Ahmed, F. De Luca, S. Devkota, S. Kobourov, M. Li, "Multicriteria Scalable Graph Drawing via Stochastic Gradient Descent $(SGD)^2$," *IEEE Transactions on Visualization and Computer Graphics*, 2022.
21. S. Nickel, M. Sondag, W. Meulemans, S. Kobourov, J. Peltonen, M. Nöllenburg, "Multicriteria Optimization of Dynamic Demers Cartograms," *IEEE Transactions on Visualization and Computer Graphics*, 2022.
22. A. Efrat, R. Fulek, S. Kobourov, C. Toth, "Polygons with Prescribed Angles in 2D and 3D," *Journal of Graph Algorithms and Applications*, 2022.
23. S. Cornelsen, M. Pfister, H. Förster, M. Gronemann, M. Hoffmann, S. Kobourov, T. Schneck, "Drawing Shortest Paths in Geodetic Graphs," *Journal of Graph Algorithms and Applications*, 2022.
24. M. Wallinger, B. Jacobsen, S. Kobourov, M. Nöllenburg, "On the Readability of Abstract Set Visualizations," *IEEE Transactions on Visualization and Computer Graphics*, vol. 27, no. 6, p. 2821-2832, 2021.

25. B. Jacobsen, M. Wallinger, S. Kobourov, M. Nöllenburg, "MetroSets: Visualizing Sets as Metro Maps," *IEEE Transactions on Visualization and Computer Graphics*, vol. 27, no. 2, p. 1257-1267, 2021.
26. I. Hossain, V. Huroyan, S. Kobourov, R. Navarrete, "Multi-Perspective, Simultaneous Embedding," *IEEE Transactions on Visualization and Computer Graphics*, vol. 27, no. 2, p. 1569-1579, 2021.
27. H. Chen, V. Huroyan, U. Soni, Y. Lu, R. Maciejewski, S. Kobourov, "Same Stats, Different Graphs: Exploring the Space of Graphs in Terms of Global Graph Properties," *IEEE Transactions on Visualization and Computer Graphics,* vol. 27, no. 3, p. 2056-2072, 2021.
28. W. Evans, S. Felsner, L. Kleist, S. Kobourov, "On Area-Universal Quadrangulations," *Journal of Graph Algorithms and Applications*, vol. 25, no. 1, p. 171-193, 2021.
29. F. De Luca, E. Di Giacomo, S. Hong, S. Kobourov, W. Lenhart, G. Liotta, H. Meijer, A. Tappini, S. Wismath, "Packing Trees into 1-planar Graphs," *Journal of Graph Algorithms and Applications*, 2021.
30. F. Sahneh, M. Balk, M. Kisley, C. Chan, M. Fox, B. Nord, E. Lyons, ... "Ten simple rules to cultivate transdisciplinary collaboration in data science," *PLoS Computational Biology*, vol. 17, no. 5, e1008879, 2021.
31. P. Simonetto, D. Archambault, S. Kobourov, "Event-Based Dynamic Graph Visualisation," *IEEE Transactions on Visualization and Computer Graphics,* vol. 26, no. 7, p. 2373-2386, 2020.
32. R. Ahmed, S. Rahman, S. Kobourov, "Online Facility Assignment," *Journal of Theoretical Computer Science*, vol. 806, p. 455-467, 2020.
33. P. Angelini, P. Eades, S. Hong, K. Klein, S. Kobourov, G. Liotta, A. Navarra, A. Tappini, "Graph Planarity by Replacing Cliques with Paths," *Algorithms*, vol. 13, no. 8, p.194-210, 2020.
34. M. Okoe, R. Jianu, S. Kobourov, "Node-link or Adjacency Matrices: Old Question, New Insights," *IEEE Transactions on Visualization and Computer Graphics,* vol. 25, no. 10, p. 2940-2952, 2019.
35. P. Kindermann, S. Kobourov, M. Löffler, M. Nöllenburg, A. Schulz, B. Vogtenhuber, "Lombardi drawings of knots and links," *Journal of Computational Geometry*, vol. 10, no. 1, p. 444-476, 2019.
36. R. Ahmed, P. Angelini, F. Sahneh, A. Efrat, D. Glickenstein, M. Gronemann, N. Heinsohn, S. Kobourov, R. Spence, J. Watkins, A. Wolff, "Multi-Level Steiner Trees," *ACM Journal of Experimental Algorithmics*, vol. 24, no. 1, p. 1-22, 2019
37. F. De Luca, I. Hossain, S. Kobourov, A. Lubiw, D. Mondal, "Recognition and Drawing of Stick Graphs," *Journal of Theoretical Computer Science*, vol. 796, p. 22-33, 2019.
38. F. De Luca, E. Di Giacomo, W. Didimo, S. Kobourov, G. Liotta, "An Experimental Study on the Ply Number of Straight-line Drawings," *Journal of Graph Algorithms and Applications*, vol. 23, no. 1, p. 71-91, 2019.
39. S. Rains, M. Hingle, M. Surdeanu, D. Bell, S. Kobourov, "A test of the risk perception attitude framework as a message tailoring strategy to promote diabetes screening" *Health Communication*, vol. 34, no. 6, p. 672-679, 2019.
40. S. Nusrat, J. Alam, C. Scheidegger, S. Kobourov, "Cartogram Visualization for Bivariate Geo-Statistical Data," *IEEE Transactions on Visualization and Computer Graphics,* vol. 24, no. 10, p. 2675-2688, 2018.
41. S. Nusrat, J. Alam, S. Kobourov, "Evaluating Cartogram Effectiveness," *IEEE Transactions on Visualization and Computer Graphics,* vol. 24, no. 2, p. 1077-1090, 2018.
42. U. Soni, Y. Lu, B. Hansen, H. Purchase, S. Kobourov, R. Maciejewski, "The Perception of Graph Properties in Graph Layouts," *Computer Graphics Forum*, special issue on EuroVis'18, vol. 37, no. 3, p. 169-181, 2018.
43. J. Zhou, D. Bell, S. Nusrat, M. Hingle, M. Surdeanu, S. Kobourov, "Calorie Estimation From Pictures of Food: Crowdsourcing Study," *Journal of Medical Internet Research (JMIR)*, vol. 7, no. 2, DOI:10.2196/ijmr.9359, 2018.
44. C. Duncan, D. Eppstein, M. Goodrich, S. Kobourov, M. Löffler, M.Nöllenburg, "Planar and Poly-Arc Lombardi Drawings," *Journal of Computational Geometry*, vol. 9, no. 1, p. 328-355, 2018.
45. A. Das, K. Fleszar, S. Kobourov, J. Spoerhase, S. Veeramoni, A. Wolff, "Approximating the Generalized Minimum Manhattan Network Problem," *Algorithmica*, vol. 80, no. 4, p. 1170-1190, 2018.
46. D. Eppstein, P. Kindermann, S. Kobourov, G. Liotta, A. Lubiw, A. Maignan, D. Mondal, H. Vosoughpour, S. Whitesides, S. Wismath, "On the Planar Split Thickness of Graphs," *Algorithmica*, vol. 80, no. 3, p. 977-994, 2018.

47. M. Chimani, S. Felsner, S. Kobourov, T. Ueckerdt, P. Valtr, A. Wolff, "On the Maximum Crossing Number," *Journal of Graph Algorithms and Applications*, vol. 22, no. 1, p. 67-87, 2018.

48. W. Evans, S. Felsner, M. Kaufmann, S. Kobourov, D. Mondal, R. Nishat, K. Verbeek, "Table Cartogram," *Computational Geometry: Theory and Applications*, vol. 68, p. 174-185, 2018.

49. J. Alam, S. Kobourov, D. Mondal, "Orthogonal Layout with Optimal Face Complexity," *Computational Geometry: Theory and Applications*, vol. 63, p. 40-52, 2017.

50. E. Welch and S. Kobourov, "Measuring Symmetry in Drawings of Graphs," *Computer Graphics Forum*, special issue on EuroVis'17, vol. 36, no. 3, 2017.

51. H. Kruiger, P. Rauber, R. Martins, A. Kerren, S. Kobourov, A. Telea, "Graph Layouts by t-SNE," *Computer Graphics Forum*, special issue on EuroVis'17, vol. 36, no. 3, 2017.

52. M. Bekos, S. Kobourov, M. Kaufmann, S. Veeramoni, "The Maximum k-Differential Coloring Problem," *Journal of Discrete Algorithms*, vol. 45, p. 35-53, 2017.

53. P. Angelini, M. Bekos, F. De Luca, W. Didimo, M. Kaufmann, S. Kobourov, F. Montecchiani, C. Raftopoulou, V. Roselli, A. Symvonis, "Vertex-Coloring with Defects," *Journal of Graph Algorithms and Applications*, vol. 21, no. 3, p. 313-340, 2017.

54. J. Alam, S. Chaplick, G. Fijavz, M. Kaufmann, S. Kobourov, S. Pupyrev, J. Toeniskoetter, "Threshold-Coloring and Unit-Cube Contact Representation of Planar Graphs," *Discrete Applied Mathematics*, vol. 216, no. 1, p. 2-14, 2017.

55. M. Bekos, T. van Dijk, M. Fink, P. Kindermann, S. Kobourov, S. Pupyrev, J. Spoerhase, A. Wolff, "Improved Approximation Algorithms for Box Contact Representations," *Algorithmica*, vol. 77, no. 3, p. 902-920, 2017

56. B. Saket, C. Scheidegger, S. Kobourov, "Comparing Node-Link and Node-Link-Group Visualizations From An Enjoyment Perspective," *Computer Graphics Forum*, special issue on EuroVis'16, vol. 35, no. 3, p. 41-50, 2016.

57. S. Nusrat and S. Kobourov, "The State of the Art in Cartograms," *Computer Graphics Forum*, special issue on EuroVis'16, vol. 35, no. 3, p. 619-640, 2016.

58. S. Emmons, S. Kobourov, M. Gallant, K. Börner, "Analysis of Network Clustering Algorithms and Cluster Quality Metrics at Scale," PLOS ONE, vol. 11, no. 7, 2016.

59. J. Alam, M. Kaufmann, S. Kobourov, T. Mchedlidze, "Fitting Planar Graphs on Planar Maps." *Journal of Graph Algorithms and Applications*, vol. 19, no. 1, p. 413-440, 2015.

60. A. Efrat, Y. Hu, S. Kobourov, S. Pupyrev, "MapSets: Visualizing Embedded and Clustered Graphs," *Journal of Graph Algorithms and Applications*, vol. 19, no. 2, p. 571-593. 2015. (Invited to this special issue on the best papers from GD'2014.)

61. B. Saket, C. Scheidegger, S. Kobourov, Katy Börner, "Map-based Visualizations Increase Long-Term Recall of Data," *Computer Graphics Forum*, special issue on EuroVis'15, vol. 34, no. 3, p. 441-450, 2015.

62. J. Alam, S. Kobourov, S. Veeramoni, "Quantitative Measures for Cartogram Generation Techniques," *Computer Graphics Forum*, special issue on EuroVis'15, vol. 34, no. 3, p. 351-360, 2015.

63. P. Angelini, W. Didimo, S. Kobourov, T. Mchedlidze, V. Roselli, A. Symvonis, S. Wismath, "Monotone Drawings of Graphs with Fixed Embedding," *Algorithmica*, vol. 71, no. 2, p. 233-257, 2015.

64. A. Das, E. Gansner, M. Kaufmann, S. Kobourov, J. Spoerhase, A. Wolff, "Approximating Minimum Manhattan Networks in Higher Dimensions," *Algorithmica*, vol. 71, no. 1, p. 36-52, 2015.

65. B. Saket, P. Simonetto, S. Kobourov, Katy Börner, "Evaluation of Node, Node-Link, and Node-Link-Group Diagrams," *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, vol. 20, no. 12, p. 2231-2240, 2014.

66. M. Bekos, M. Kaufmann, S. Kobourov, S. Veeramoni, "A Note on Maximum Differential Coloring of Planar Graphs," *Journal of Discrete Algorithms*, vol. 29, p. 1-7, 2014.

67. Y. Hu, S. Kobourov, S. Veeramoni, "Embedding, Clustering and Coloring for Dynamic Maps," *Journal of Graph Algorithms and Applications*, vol. 18, no. 1, p. 77-109, 2014.

68. C. Duncan, D. Eppstein, M. Goodrich, S. Kobourov, M. Nöllenburg, "Drawing Trees with Perfect Angular Resolution and Polynomial Area," *Discrete & Computational Geometry*, Vol. 49, no. 2, p. 157-182, 2013.

69. M. Hingle, D. Yoon, J. Fowler, S. Kobourov, M. Schneider, D. Falk, R. Burd, "Collection and visualization of dietary behavior and reasons for eating using a popular and free social media software application," *Journal of Medical Internet Research (JMIR)*, Vol. 15, no. 6, p.125-145, 2013.

70. J. Alam, T. Biedl, S. Felsner, A. Gerasch, M. Kaufmann, S. Kobourov, "Linear-Time Algorithms for Proportional Contact Graph Representations." *Algorithmica*, Vol. 67, p. 3-22, 2013. (Invited to this special issue as the best paper award winner from ISAAC'2011.)

71. M. Bekos, M. Kaufmann, S. Kobourov, A. Symvonis, "Smooth Orthogonal Layouts," *Journal of Graph Algorithms and Applications*, vol. 17, no. 5, p. 575-595, 2013.

72. J. Alam, T. Biedl, S. Felsner, M. Kaufmann, S. Kobourov, T. Ueckerdt, "Computing Cartograms with Optimal Complexity," *Discrete & Computational Geometry*, vol. 50, no. 3, p. 784-810, 2013.

73. E. Gansner, Y. Hu, M. Kaufmann, S. Kobourov, "Optimal Polygonal Representation of Planar Graphs," *Algorithmica*, vol. 63, no. 3, p. 672-691, 2012. (Invited to this special issue on the best papers from LATIN'2010.)

74. J. Alam, T. Biedl, S. Felsner, M. Kaufmann, S. Kobourov, "Proportional Contact Representations of Planar Graphs," *Journal of Graph Algorithms and Applications*, vol. 16, no. 3, p. 701-728, 2012. (Invited to this special issue on the best papers from GD'2011.)

75. Y. Hu, S. Kobourov, D. Mashima, "Visualizing Dynamic Data with Maps," *IEEE Transactions on Visualization and Computer Graphics*, vol. 18, no. 9, p. 1424-1437, 2012. (Invited to this special issue on the best papers from PacificVis'2011.)

76. J. Fowler, M. Juenger, S. Kobourov, M. Schulz, "Characterizations of Restricted Pairs of Planar Graphs Allowing Simultaneous Embedding with Fixed Edges," *Computational Geometry: Theory and Applications*, vol. 44, no. 8, p. 385-398, 2011.

77. U. Brandes, C. Erten, A. Estrella-Balderrama, J, Fowler, F. Frati, M. Geyer, C. Gutwenger, S. Hong, M. Kaufmann, S. Kobourov, G. Liotta, P. Mutzel, A. Symvonis, "Colored Simultaneous Geometric Embeddings and Universal Pointsets," *Algorithmica*, vol. 60. no. 3, p. 569-592, 2011. (Invited to the special issue on the best papers from ACG 07.)

78. C. Duncan, S. Kobourov, M. Goodrich, "Planar Drawings of Higher-Genus Graphs," *Journal of Graph Algorithms and Applications*, vol. 15, no. 1, p. 7-32, 2011. (Invited to the special issue on the best papers from GD 2009.)

79. C. Duncan, D. Eppstein, M. Goodrich, S. Kobourov, M. Nöllenburg, "Lombardi Drawings of Graphs," *Journal of Graph Algorithms and Applications*, vol. 16, no. 1, p. 85-108, 2011. (Invited to this special issue on the best papers from GD'2010.)

80. C. Binucci, E. Di Giacomo, W. Didimo, A. Estrella-Balderrama, F. Frati, S. Kobourov, G. Liotta, "Upward Straight-line Embeddings of Directed Graphs into Point Sets," *Computational Geometry: Theory and Applications*, vol. 43, no. 2, p. 219-232, 2010.

81. A. Estrella-Balderrama, J. Fowler, S. Kobourov, "GraphSET, a tool for simultaneous graph drawing," *Software: Practice and Experience*, vol. 10, no. 40, p. 849-863, 2010.

82. C. Erten, A. Efrat, D. Forrester, A. Iyer, S. Kobourov, "Force-Directed Approaches to Sensor Localization," *IEEE Transaction on Sensor Networks*, vol. 7, no. 3, p. 1-25, 2010.

83. E. Gansner, Y. Hu, S. Kobourov, "Visualizing Graphs and Clusters as Maps," *IEEE Computer Graphics and Applications*, vol. 30, no. 6, p.54–66, 2010. (Invited to this special issue on the best papers from PacificVis'2010.)

84. F. Frati, M. Kaufmann, S. Kobourov, "Constrained Simultaneous and Near-Simultaneous Embeddings," *Journal of Graph Algorithms and Applications*, vol. 13, no. 3, p. 447-465, 2009, (Invited to this special issue on the best papers from GD'2007.)

85. A. Estrella-Balderrama, J. Fowler, S. Kobourov, "Characterization of Unlabeled Level Planar Trees", *Computational Geometry: Theory and Applications*, vol. 42, no. 6, p. 704-721, 2009.

86. S. Kobourov and M. Landis, "Morphing Planar Graphs in Spherical Space," *Journal of Graph Algorithms and Applications*, vol. 12, no. 1, p.113-127, 2008. (Invited to this special issue on the best papers from GD'2006.)

87. J. Cappos, A. Estrella-Balderrama, J. Fowler, S. Kobourov, "Simultaneous Graph Embedding with Bends and Circular Arcs," *Computational Geometry: Theory and Applications*, vol. 42, no. 2, p. 173-182, 2008.

88. P. Brass, E. Cenek, C. Duncan, A. Efrat, C. Erten, D. Ismailescu, S. Kobourov, A. Lubiw, J. Mitchell, "On Simultaneous Planar Graph Embeddings," *Computational Geometry: Theory and Applications*, vol. 36, no. 2, p. 117-130, 2007.

89. A. Efrat, C. Erten, S. Kobourov, "Fixed-Location Circular-Arc Drawing of Planar Graphs," *Journal of Graph Algorithms and Applications*. vol. 11, no. 1, p. 145-164, 2007.

90. C. Duncan, S. Kobourov, V. S. A. Kumar, "Optimal Constrained Graph Exploration," *ACM Transactions on Algorithms*, vol. 2, no. 3, p. 380-402, 2007.

91. C. Erten and S. Kobourov, "Simultaneous Embedding of Planar Graphs with Few Bends," *Journal of Graph Algorithms and Applications*, vol. 9, no. 3, p. 347–364, 2006. (Invited to this special issue on the best papers from GD'2004.)

92. C. Duncan, A. Efrat, S. Kobourov, C. Wenk, "Drawing Graphs with Fat Edges," *International Journal of Foundations of Computer Science*. vol. 17, no. 5, p. 1143–1165, 2006. (Invited to this special issue on graph drawing.)

93. A. Efrat, S. Kobourov, A. Lubiw, "Computing Homotopic Shortest Paths Efficiently," *Computational Geometry: Theory and Applications*, vol. 35, no. 3, p. 162-172, 2006.

94. C. Erten and S. Kobourov, "Simultaneous Embedding of a Planar Graph and Its Dual on the Grid," *Theory of Computing Systems*, vol. 38, no. 3, p. 313–327, 2005. (Invited to this special issue on the best papers from ISAAC 2002).

95. C. Erten, S. Kobourov, V. Le, A. Navabi, "Simultaneous Graph Drawing: Layout Algorithms and Visualization Schemes," *Journal of Graph Algorithms and Applications*, vol. 9, no. 1, p. 165–182, 2005. (Invited to this special issue on the best papers from GD'2003.)

96. S. Kobourov and K. Wampler, "Non-Euclidean Spring Embedders," *IEEE Transactions on Visualization and Computer Graphics*, vol. 11, no. 6, p. 757–767, 2005.

97. C. Collberg and S. Kobourov, "Self-Plagiarism in Computer Science," *Communications of the ACM*, vol. 48, no. 4, p. 88–94, 2005.

98. P. Gajer, M. Goodrich, S. Kobourov, "A Multi-Dimensional Approach to Force-Directed Layouts of Large Graphs," *Computational Geometry: Theory and Applications*, vol. 29, no. 1, p. 3–18, 2004. (Invited to this special issue on the best papers from CGC'2001.)

99. T. Biedl, E. Demaine, C. Duncan, R. Fleischer, S. Kobourov, "Tight Bounds on Maximal and Maximum Matching," *Journal of Discrete Mathematics*, vol. 285, no. 1, p. 7–15, 2004.

100. C. Duncan and S. Kobourov, "Polar Coordinate Drawing of Planar Graphs with Good Angular Resolution," *Journal of Graph Algorithms and Applications*, vol. 7, no. 4, p. 311–333, 2003. (Invited to this special issue on the best papers from GD'2001.)

101. C. Duncan, M. Goodrich, S. Kobourov, "Planarity-Preserving Clustering and Embedding for Large Planar Graphs," *Computational Geometry: Theory and Applications*, vol. 24, no. 3, p. 95–114, 2002. (Invited to this special issue on the best papers from GD'99.)

102. P. Gajer and S. Kobourov, "GRIP: Graph Drawing with Intelligent Placement," *Journal of Graph Algorithms and Applications*, vol. 6, no. 3, p. 203–224, 2002. (Invited to this special issue on the best papers from GD'2000.)

103. C. Cheng, C. Duncan, M. Goodrich, S. Kobourov, "Drawing Planar Graphs with Circular Arcs," *Discrete & Computational Geometry*, vol. 25, p. 405–418, 2001.

104. C. Duncan, M. Goodrich, S. Kobourov, "Balanced Aspect Ratio Trees: Combining the Advantages of k-d Trees and Octrees," *Journal of Algorithms*, vol. 38, p. 303–333, 2001. (Invited to this special issue on best papers from SODA'99.)

105. C. Duncan, M. Goodrich, S. Kobourov, "Balanced Aspect Ratio Trees and Their Use for Drawing Large Graphs," *Journal of Graph Algorithms and Applications*, vol. 4, p. 19–46, 2000. (Invited to this special issue on best papers from GD'98.)

Refereed Conference Publications

1. M. Wallinger, S. Kobourov, "A Task Taxonomy for Edge and Trail Bundling," *IEEE VIS Short Papers*, 2026.
2. Y. Ji, T. Brand, J. Miller, P. Zhang, S. Kobourov, Y. Hu, "Visualizing High-Dimensional Graph Embeddings via Informed Multi-View Projections," *IEEE VIS*, 2026.
3. M. Wallinger, J. Miller, A. Maftei, S. Kobourov, "Quantitative Metrics for Edge Bundling of Network Visualizations," *28th Eurographics Conference on Visualization (EuroVis)*, 2026. (**Best paper honorable mention**)
4. K. Gunaratne, J. Miller, S. Kobourov, "Class Angular Distortion Index for Dimensionality Reduction," *28th Eurographics Conference on Visualization (EuroVis)*, 2026.
5. L. Felder, J. Miller, M. Wallinger, S. Kobourov, C. Chen, "RETRACE: Interactive Visualizations for Reasoning Traces of Large Reasoning Models," *28th Eurographics Conference on Visualization (EuroVis)*, 2026.
6. T. Brand, S. Felsner, H. Förster, S. Kobourov, A. Lubiw, Y. Okamoto, J. Pach, C. Toth, G. Toth, T. Ueckerdt, P. Valtr, "Rerouting Curves on Surfaces" *34th Annual European Symposium on Algorithms (ESA)*, 2026.
7. M. Wallinger, O. Navarro, S. Kobourov, "Minimum-Width Drawings of Trees with Sized Vertices," *34th International Symposium on Graph Drawing and Network Visualization (GD)*, 2026.
8. H. Förster, M. Hoffmann, S. Kobourov, M. Pavlidi, A. Weinberger, J. Zink, "Weighted Book Thickness," *34th International Symposium on Graph Drawing and Network Visualization (GD)*, 2026.
9. T. Brand, H. Förster, S. Kobourov, D. Kohrt, R. Schukrafft, M. Wallinger, J. Zink, "Using Reinforcement Learning to Optimize the Global and Local Crossing Number," *34th International Symposium on Graph Drawing and Network Visualization (GD)*, 2026.
10. V. Huroyan, Md. Rahat-uz-Zaman, S. Kobourov, "3DMPE: 3D Multi-Perspective Embedding," *38th Canadian Conference on Computational Geometry (CCCG)*, 2026.
11. E. Arkin, A. Efrat, O. Filtser, S. Kobourov, J. Kratochvl, J. Mitchell, A. Rosenberg, "The Gate-Cover Problem," *20th International Conference and Workshop on Algorithms and Computation (WALCOM)*, 2026.
12. S. Cornelsen, H. Förster, S. Gupta, S. Kobourov, J. Zink, "Hypergraphs as Metro Maps: Drawing Paths with Few Bends in Trees, Cacti, and Plane 4-Graphs," *51st Intl. Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, 2026.
13. J. Miller, D. Bhatia, S. Kobourov, H. Purchase, "Euclidean, Spherical and Hyperbolic Networks: An Empirical Study of Matching Network Structure to Best Visualizations," *27th Eurographics Conference on Visualization (EuroVis)*, 2025.
14. G. Mooney, H. Purchase, M. Wybrow, J. Miller, S. Kobourov, "Stress in Graph Drawings: Perception, Preference, and Performance", *33rd International Symposium on Graph Drawing and Network Visualization (GD)*, 2025.
15. I. Hossain, E. Moradi, D. Mondal, S. Kobourov, "Map Visualizations for Graphs with Group Restrictions", *51th Graphics Interface Conference (GI)*, 2025.
16. A. Dobler, S. Kobourov, D. Mondal, M. Nöllenburg, "Representing Hypergraphs by Point-Line Incidences", *50th Intl. Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, 2025.
17. G. Mooney, H. Purchase, M. Wybrow, S. Kobourov, "The Multi-Dimensional Landscape of Graph Drawing Metrics" *17th IEEE Pacific Visualization Symposium (PACIFICVIS)*, 2024. (**Best paper award**)
18. J. Miller, V. Huroyan, R. Navarrete, I. Hossain, S. Kobourov, "ENS-t-SNE: Embedding Neighborhoods Simultaneously t-SNE" *17th IEEE Pacific Visualization Symposium (PACIFICVIS)*, 2024.
19. J. Miller, D. Bhatia, S. Kobourov, "State of the Art of Graph Visualization in non-Euclidean Spaces" *26th Eurographics Conference on Visualization (EuroVis)*, 2024.
20. K. Smelser, J. Miller, S. Kobourov, "Normalized Stress is not Normalized: How to Interpret Stress Correctly" *10th Workshop on Evaluation and Beyond - MethodoLogIcal Approaches for Visualization (BELIV)*, 2024.
21. G. Mooney, H. Purchase, M. Wybrow, S. Kobourov, J. Miller, "The Perception of Stress in Graph Drawings," *32nd International Symposium on Graph Drawing and Network Visualization (GD)*, 2024.
22. H. Förster, F. Klesen, T. Dwyer, P. Eades, S. Hong, S. Kobourov, G. Liotta, K. Misue, F. Montecchiani, A. Pastukhov, F. Schreiber, "GraphTrials: Visual Proofs of Graph Properties", *32nd International Symposium on Graph Drawing and Network Visualization (GD)*, 2024. (**Best paper award**)

23. W. Evans, K. Koeck, S. Kobourov, "Visualization of Bipartite Graphs in Limited Window Size," *49th Intl. Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, 2024.

24. A. Kuckuk, J. Katheder, S. Kobourov, M. Pfister, J. Zink, "Simultaneous Drawing of Layered Trees", *18th International Conference and Workshop on Algorithms and Computation (WALCOM)*, 2024.

25. S. Feyer, B. Pinaud, S. Kobourov, N. Birch, M. Krone, A. Kerren, M. Behrisch, F. Schreiber, K. Klein, "2D, 2.5D, or 3D? An Exploratory Study on Multilayer Network Visualisations in Virtual Reality," *29th IEEE Symposium on Visualization (VIS)*, 2023.

26. J. Miller, V. Huroyan, S. Kobourov, "Balancing between the Local and Global Structures (LGS) in Graph Embedding," *31st International Symposium on Graph Drawing and Network Visualization (GD)*, 2023.

27. W. Didimo, F. Fomin, P. Golovach, T. Inamdar, S. Kobourov, M. Sieper, "Parameterized and Approximation Algorithms for the Maximum Bimodal Subgraph Problem," *31st International Symposium on Graph Drawing and Network Visualization (GD)*, 2023.

28. S. Kobourov, M. Loffler, F. Montecchiani, M. Pilipczuk, I. Rutter, R. Seidel, and M. Sorge, "The Influence of Dimensions on the Complexity of Computing Decision Trees," *37th AAAI Conference on Artificial Intelligence (AAAI)*, 2023.

29. E. Noriega-Atala, R. Zaman, S. Kobourov, R. Bhat, M. Jergovic, J. Nikolich, "Visualizing Interaction Networks and Evidence in Biomedical Corpora," *16th IEEE Pacific Visualization Symposium (PACIFICVIS)*, 2023.

30. M. Bekos, H. Förster, M. Kaufmann, S. Kobourov, M. Kryven, A. Kuckuk, L. Schlipf, "On the 2-Layer Window Width Minimization Problem," *48th Intl. Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, 2023. (**Best paper award**)

31. R. Ahmed, K. Hamm, S. Kobourov, M. Jebelli, F. Sahneh, R. Spence, "Multi-Priority Graph Sparsification," *34th Intl. Workshop on Combinatorial Algorithms (IWOCA)*, 2023.

32. K. Gray, M. Li, R. Ahmed, S. Kobourov, "Visualizing Evolving Trees," *30th International Symposium on Graph Drawing and Network Visualization (GD)*, 2022.

33. J. Miller, V. Huroyan, S. Kobourov, "Spherical Graph Drawing by Multidimensional Scaling," *30th International Symposium on Graph Drawing and Network Visualization (GD)*, 2022.

34. M. Bekos, S. Felsner, P. Kindermann, S. Kobourov, J. Kratochvil, I. Rutter, "The Rique-Number of Graphs," *30th International Symposium on Graph Drawing and Network Visualization (GD)*, 2022.

35. R. Ahmed, S. Kobourov, M. Kryven, "An FPT Algorithm for Bipartite Vertex Splitting," *30th International Symposium on Graph Drawing and Network Visualization (GD)*, 2022.

36. J. Miller, S. Kobourov, V. Huroyan, "Browser-based Hyperbolic Visualization of Graphs," *15th IEEE Pacific Visualization Symposium (PACIFICVIS)*, 2022.

37. J. Klawitter, B. Klemz, F. Klesen, S. Kobourov, M. Kryven, A. Wolff and J. Zink, "The Segment Number: Algorithms and Universal Lower Bounds for Some Classes of Planar Graphs," *48th International Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, 2022.

38. K. Gray, M. Li, R. Ahmed, K. Rahman, A. Azad, S. Kobourov, K. Börner, "A Map-based Interactive System for Visualizing Large Networks with Semantic Zooming," *Workshop on Map-based Interfaces and Interactions (MAPII)*, 2022.

39. R. Spence, S. Kobourov, F. Sahneh, "Approximation Algorithms for Priority Steiner Tree Problems," *27th International Computing and Combinatorics Conference (COCOON)*, 2021.

40. H. Lim and S. Kobourov, "Visualizing The Intermediate Representation of Just-in-Time Compilers," *29th International Symposium on Graph Drawing and Network Visualization (GD)*, 2021.

41. R. Ahmed, G. Bodwin, K. Hamm, S. Kobourov, R. Spence, "Sparse and Lightweight Spanners in Weighted Graphs with Local Additive Error," *47th International Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, 2021.

42. R. Ahmed, G. Bodwin, F. Darabi, K. Hamm, S. Kobourov, R. Spence, "Multi-level Weighted Additive Spanners," *20th Symposium on Experimental Algorithms (SEA)*, 2021.

43. M. Wallinger, B. Jacobsen, S. Kobourov, M. Nöllenburg, "On the Readability of Abstract Set Visualizations," *14th IEEE Pacific Visualization Symposium (PACIFICVIS)*, 2021.

44. F. Frank, M. Kaufmann, S. Kobourov, T. Mchedlidze, S. Pupyrev, T. Ueckerdt, A. Wolff, "Using the Metro-Map Metaphor for Drawing Hypergraphs," *47th Intl. Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, p. 361-372, 2021.
45. B. Jacobsen, M. Wallinger, S. Kobourov, M. Nöllenburg, "MetroSets: Visualizing Sets as Metro Maps," *26th IEEE Symposium on Information Visualization (INFOVIS)*, 2020.
46. I. Hossain, V. Huroyan, S. Kobourov, R. Navarrete, "Multi-Perspective, Simultaneous Embedding," *26th IEEE Symposium on Information Visualization (INFOVIS)*, 2020.
47. R. Ahmed, F. Darabi, K. Hamm, S. Kobourov, R. Spence, "Kruskal-based approximation algorithm for the multi-level Steiner tree problem," *28th Annual European Symposium on Algorithms (ESA)*, 2020.
48. S. Cornelsen, M. Pfister, H. Förster, M. Gronemann, M. Hoffmann, S. Kobourov, T. Schneck, "Drawing Shortest Paths in Geodetic Graphs," *28th International Symposium on Graph Drawing and Network Visualization (GD)*, 2020.
49. A. Efrat, R. Fulek, S. Kobourov, C. Toth, "Polygons with Prescribed Angles in 2D and 3D," *28th International Symposium on Graph Drawing and Network Visualization (GD)*, 2020.
50. R. Ahmed, F. De Luca, S. Devkota, S. Kobourov, M. Li, "Graph drawing via gradient descent," *28th International Symposium on Graph Drawing and Network Visualization (GD)*, 2020. (**Best paper award**)
51. H. Purchase, D. Archambault, S. Kobourov, M. Nöllenburg, S. Pupyrev, H.-Y. Wu, "The Turing Test for Graph Drawing Algorithms," *28th International Symposium on Graph Drawing and Network Visualization (GD)*, 2020.
52. R. Ahmed, G. Bodwin, F. Sahneh, S. Kobourov, R. Spence, "Weighted Additive Spanners," *46th International Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, 2020.
53. K. Gray, M. Yin, S. Perry, S. Kobourov, "Drawing Graphs on the Sphere," *13th International Conference on Advanced Visual Interfaces (AVI)*, 2020.
54. S. Nusrat, J. Alam, S. Kobourov, "Recognition and Recall of Geographic Data In Cartograms," *13th International Conference on Advanced Visual Interfaces (AVI)*, 2020.
55. E. Arkin, F. Sahneh, A. Efrat, F. Frank, R. Fulek, S. Kobourov, J. Mitchell, "Computing β-Stretch Paths in Drawings of Graphs," *17th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT)*, 2020.
56. F. De Luca, E. Di Giacomo, S. Hong, S. Kobourov, W. Lenhart, G. Liotta, H. Meijer, A. Tappini, S. Wismath, "Packing Trees into 1-planar Graphs," *14th International Conference and Workshop on Algorithms and Computation (WALCOM)*, 2020.
57. H. Van, A. Musa, H. Chen, S. Kobourov, M. Surdeanu, "What does the language of foods say about us?" *10th Workshop on Health Text Mining and Information Analysis (LOUHI)*, 2019.
58. F. De Luca, I. Hossain, S. Kobourov, "Symmetry Detection and Classification in Drawings of Graphs," *27th International Symposium on Graph Drawing and Network Visualization (GD)*, 2019. (**Best paper award**)
59. S. Devkota, R. Ahmed, F. De Luca, K. Isaacs, S. Kobourov, "Stress-Plus-X (SPX) Graph Layout," *27th International Symposium on Graph Drawing and Network Visualization (GD)*, 2019.
60. M. Sondag, W. Meulemans, S. Nickel, M. Nöllenburg, M. Chimani, J. Peltonen, "Computing Stable Demers Cartograms," *27th International Symposium on Graph Drawing and Network Visualization (GD)*, 2019.
61. P. Angelini, H. Förster, M. Hoffmann, M Kaufmann, S. Kobourov, G. Liotta, M. Patrigniani, "The QuaSEFE Problem," *27th International Symposium on Graph Drawing and Network Visualization (GD)*, 2019.
62. N. Mamano, A. Efrat, D. Eppstein, D. Frishberg, M. Goodrich, S. Kobourov, P. Matias, V. Polishchuk, "New Applications of Nearest-Neighbor Chains: Euclidean TSP and Motorcycle Graphs," *30th International Symposium on Algorithms and Computation (ISAAC)*, 2019.
63. R. Ahmed, K. Hamm, M. Jebelli, S. Kobourov, F. Sahneh, R. Spence, "Approximation algorithms and an integer program for multi-level graph spanners," *Symposium on Experimental Algorithms (SEA)*, 2019.
64. F. De Luca, S. Kobourov, H. Purchase, "Perception of Symmetries in Drawings of Graphs," *26th Symposium on Graph Drawing (GD)*, 2018.
65. H. Chen, U. Soni, Y. Lu, R. Maciejewski, S. Kobourov, "Same Stats, Different Graphs (Graph Statistics and Why We Need Graph Drawings)," *26th Symposium on Graph Drawing (GD)*, 2018.

66. F. De Luca, I. Hossain, S. Kobourov, A. Lubiw, D. Mondal, "Recognition and Drawing of Stick Graphs," *26th Symposium on Graph Drawing (GD)*, 2018.
67. P. Angelini, P. Eades, S. Hong, K. Klein, S. Kobourov, G. Liotta, A. Navarra, A. Tappini, "Turning Cliques into Paths to Achieve Planarity," *26th Symposium on Graph Drawing (GD)*, 2018.
68. R. Ahmed, S. Kobourov, S. Rahman, "Online Facility Assignment," *12th International Conference and Workshops on Algorithms and Computation (WALCOM)*, p. 156-168, 2018. (**Best paper award**)
69. U. Soni, Y. Lu, B. Hansen, H. Purchase, S. Kobourov, R. Maciejewski, "The Perception of Graph Properties in Graph Layouts," *20th IEEE Eurographics Conference on Visualization (EuroVis)*, 2018.
70. R. Ahmed, P. Angelini, F. Sahneh, A. Efrat, D. Glickenstein, M. Gronemann, N. Heinsohn, S. Kobourov, R. Spence, J. Watkins, A. Wolff, "Multi-Level Steiner Trees," *17th Symposium on Experimental Algorithms (SEA)*, 2018.
71. D. Bell, E. Laparra, A. Kousik, T. Ishihara, M. Surdeanu, S. Kobourov, "Detecting Diabetes Risk from Social Media Activity," *9th Workshop on Health Text Mining and Information Analysis (LOUHI)*, 2018.
72. I. Hossain, S. Kobourov, H. Purchase, M. Surdeanu, "REMatch: Research Expert Matching System," *4th International Symposium on Big Data Visual and Immersive Analytics (BVDA)*, 2018.
73. R. Burd, K. Espy, I. Hossain, S. Kobourov, N. Merchant, H. Purchase, "GRAM: Global Research Activity Map," 12th International Conference on Advanced Visual Interfaces (AVI), 2018.
74. M. Okoe, R. Jianu, S. Kobourov, "Revisited Network Representations," *25th Symposium on Graph Drawing (GD)*, 2017. (**Best paper award**)
75. P. Simonetto, D. Archambault, S. Kobourov, "Drawing Dynamic Graphs Without Timeslices," *25th Symposium on Graph Drawing (GD)*, 2017.
76. P. Kindermann, S. Kobourov, M. Loeffler, M. Noellenburg, A. Schulz, B. Vogtenhuber, "Lombardi Drawings of Knots and Links," *25th Symposium on Graph Drawing (GD)*, 2017.
77. P. Angelini, S. Chaplick, F. De Luca, J. Fiala, J. Hancl, N. Heinsohn, M. Kaufmann, S. Kobourov, J. Kratochvil, P. Valtr, "On Vertex- and Empty-Ply Proximity Drawings," *25th Symposium on Graph Drawing (GD)*. 2017.
78. E. Welch and S. Kobourov, "Measuring Symmetry in Drawings of Graphs," *19th IEEE Eurographics Conference on Visualization (EuroVis)*, 2017.
79. H. Kruiger, P. Rauber, R. Martins, A. Kerren, S. Kobourov, A. Telea, "Graph Layouts by t-SNE," *19th IEEE Eurographics Conference on Visualization (EuroVis)*, 2017.
80. M. Chimani, S. Felsner, S. Kobourov, T. Ueckerdt, P. Valtr, A. Wolff, "On the Maximum Crossing Number," 28th International Workshop on Combinatorial Algorithms (IWOCA), 2017.
81. F. De Luca, E. Di Giacomo, W. Didimo, S. Kobourov, G. Liotta, "An Experimental Study on the Ply Number of Straight-line Drawings," *11th International Conference and Workshops on Algorithms and Computation (WALCOM)*, p. 135-148, 2016.
82. P. Angelini, M. Bekos, T. Bruckdorfer, J. Hančl, M. Kaufmann, S. Kobourov, A. Symvonis, P. Valtr, "Low Ply Drawings of Trees," *24th International Symposium on Graph Drawing and Network Visualization (GD)*, p. 236-248, 2016.
83. B. Saket, C. Scheidegger, S. Kobourov, "Comparing Node-Link and Node-Link-Group Visualizations From An Enjoyment Perspective," *18th IEEE Eurographics Conference on Visualization (EuroVis)*, 2016.
84. S. Nusrat and S. Kobourov, "The State of the Art in Cartograms," *18th IEEE Eurographics Conference on Visualization (EuroVis)*, 2016.
85. D. Bell, D. Fried, L. Huangfu, M. Surdeanu, S. Kobourov, "Towards Using Social Media to Identify Individuals at Risk for Preventable Chronic Illness," *10th International Conference on Language Resources and Evaluation (LREC),* 2016.
86. D. Eppstein, P. Kindermann, S. Kobourov, G. Liotta, A. Lubiw, A. Maignan, D. Mondal, H. Vosoughpour, S. Whitesides, S. Wismath, "On the Planar Split Thickness of Graphs," *12th Latin American Theoretical Informatics Symposium (LATIN)*, p. 403-415, 2016.
87. J. Alam, S. Kobourov, D. Mondal, "Orthogonal Layout with Optimal Face Complexity," *42nd International Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, p. 121-133, 2016.

88. J. Alam, M. Kaufmann, S. Kobourov, "On Contact Graphs with Cubes and Proportional Boxes," *42nd International Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, p. 107-120, 2016.

89. J. Alam, S. Kobourov, S. Pupyrev, J. Toeniskoetter, "Weak Unit Disk and Interval Representation of Graphs," *41st International Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, p. 237-251, 2016.

90. B. Saket, C. Scheidegger, S. Kobourov, Katy Börner, "Map-based Visualizations Increase Long-Term Recall of Data," *17th IEEE Eurographics Conference on Visualization (EuroVis)*, 2015.

91. J. Alam, S. Kobourov, S. Veeramoni, "Quantitative Measures for Cartogram Generation Techniques," *17th IEEE Eurographics Conference on Visualization (EuroVis)*, 2015.

92. T. Johnson, C. Acedo, S. Kobourov, S. Nusrat, "Analyzing the Evolution of the Internet," *17th IEEE Eurographics Conference on Visualization (EuroVis – short papers)*, 2015.

93. S. Kobourov and S. Nusrat, "Task Taxonomy for Cartograms," *17th IEEE Eurographics Conference on Visualization (EuroVis – short papers)*, 2015.

94. B. Saket, S. Kobourov, C. Scheidegger, "Towards Understanding Enjoyment and Flow in Information Visualization," *17th IEEE Eurographics Conference on Visualization (EuroVis – short papers)*, 2015.

95. J. Alam, W. Evans, D. Eppstein, S. Kobourov, S. Pupyrev, J. Toeniskoetter, T. Ueckerdt, "Contact Representations of Non-Planar Graphs," *Algorithms and Data Structures Symposium (WADS)*, p. 14-27, 2015.

96. J. Alam, D. Eppstein, M. Kaufmann, S. Kobourov, S. Pupyrev, A. Schulz, T. Ueckerdt, "Contact Graphs of Circular Arcs," *Algorithms and Data Structures Symposium (WADS)*, p. 1-13, 2015.

97. E. Di Giacomo, W. Didimo, S. Hong, M. Kaufmann, S. Kobourov, G. Liotta, K. Misue, A. Symvonis, H. Yen, "Low Ply Graph Drawing," *6th IEEE International Conference on Information, Intelligence, Systems and Applications (IISA)*, p. 1-6, 2015.

98. T. Bruckdorfer, M. Kaufmann, S. Kobourov, S. Pupyrev, "On Embeddability of Buses in Point Sets," *23rd Symposium on Graph Drawing (GD)*, p. 395-408, 2015.

99. M. Bekos, S. Kobourov, M. Kaufmann, S. Veeramoni, "The Maximum k-Differential Coloring Problem," *41st Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, p. 115-127, 2015.

100. B. Saket, P. Simonetto, S. Kobourov, Katy Börner, "Evaluation of Node, Node-Link, and Node-Link-Group Diagrams," *20th IEEE Symposium on Information Visualization (INFOVIS)*, p. 2231-2240, 2014.

101. J. Fowler, T. Johnson, P. Simonetto, M. Schneider, C. Acedo, S. Kobourov, L. Lazos, "IMap: Visualizing Network Activity over Internet Maps," *11th Visualization for Cyber Security Conference (VizSec)*, p. 80-87, 2014.

102. D. Fried, M. Surdeanu, S. Kobourov, M. Hingle, "Analyzing the Language of Food on Social Media," *IEEE International Conference on Big Data (BigData)*, p. 778-783, 2014.

103. M. Bekos, T. van Dijk, M. Fink, P. Kindermann, S. Kobourov, S. Pupyrev, J. Spoerhase, A. Wolff, "Improved Approximation Algorithms for Box Contact Representations," *22nd European Symposium on Algorithms (ESA)*, p. 87-99, 2014.

104. S. Pupyrev, P. Simonetto, S. Kobourov, "Visualizing Graphs as Maps with Contiguous Regions," *16th IEEE Eurographics Conference on Visualization (EuroVis – short papers)*, p. 31-35, 2014.

105. S. Kobourov, B. Saket, P. Simonetto, "Group-Level Graph Visualization Taxonomy," *16th IEEE Eurographics Conference on Visualization (EuroVis – short papers)*, p. 85-89, 2014.

106. S. Kobourov, S. Pupyrev, B. Saket, "Are Crossings Important for Drawing Large Graphs," *22nd Symposium on Graph Drawing (GD)*, p. 234-245, 2014.

107. J. Alam, D. Eppstein, M. Goodrich, S. Kobourov, S. Pupyrev, "Balanced Circle Packings for Planar Graphs," *22nd Symposium on Graph Drawing (GD)*, p. 125-136, 2014.

108. A. Efrat, Y. Hu, S. Kobourov, S. Pupyrev, "MapSets: Visualizing Embedded and Clustered Graphs," *22nd Symposium on Graph Drawing (GD)*, p. 452-463, 2014.

109. J. Alam, S. Kobourov, G. Liotta, S. Pupyrev, S. Veeramoni, "Proportional Contact Representations Using Ls" *5th IEEE International Conference on Information, Intelligence, Systems and Applications (IISA)*, p. 27-32, 2014.

110. J. Alam, M. Kaufmann, S. Kobourov, T. Mchedlidze, "Fitting Planar Graphs on Planar Maps." *40th Conference on Current Trends in Theory and Practice of Computer Science (SofSem)*, p. 52-64, 2014.

111. L. Barth, S. Fabrikant, S. Kobourov, A. Lubiw, M. Nöllenburg, Y. Okamoto, S. Pupyrev, C. Squarcella, T. Ueckerdt, A. Wolff, "Semantic word cloud representations: Hardness and approximation algorithms," *11th Latin American Theoretical Informatics Symposium (LATIN)*, p. 514-525, 2014.

112. J. Alam, M. Bekos, M. Kaufmann, S. Kobourov, P. Kindermann, A. Wolff, "Smooth Orthogonal Drawings of Planar Graphs," *11th Latin American Theoretical Informatics Symposium (LATIN)*, p. 144-155, 2014.

113. J. Alam, S. Kobourov, S. Pupyrev, J. Toeniskoetter, "Happy Edges: Threshold-Coloring of Regular Lattices," *FUN with Algorithms (FUN)*, p. 28-39, 2014.

114. D. Fried and S. Kobourov, "Maps of Computer Science," *7th IEEE Pacific Visualization Symposium (PacificVis)*, p. 113-120, 2014.

115. L. Cruz, S. Kobourov, S. Pupyrev, P. Shen, S. Veeramoni, "Computing Consensus Curves," *13th Symposium on Experimental Algorithms (SEA)*, p. 223–234, 2014.

116. L. Barth, S. Kobourov, S. Pupyrev, "Experimental Comparison of Semantic Word Clouds," *13th Symposium on Experimental Algorithms (SEA)*, p. 247–258, 2014.

117. S. Kobourov, T. Ueckerdt, K. Verbeek, "Combinatorial and Geometric Properties of Planar Laman Graphs." *ACM-SIAM Symposium on Discrete Algorithms (SODA)*, p. 1668-1779, 2013.

118. J. Kämper, S. Kobourov, M. Nöllenburg, "Circular-arc cartograms." *6th IEEE Pacific Visualization Symposium (PacificVis)*, p. 1-9, 2013.

119. J. Alam, S. Chaplick, G. Fijavz, M. Kaufmann, S. Kobourov, S. Pupyrev, "Threshold-Coloring and Unit-Cube Contact Representation of Graphs," *39th International Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, p. 26-37, 2013.

120. S. Chaplick, S. Kobourov, T. Ueckerdt, "Equilateral L-Contact Graphs," *39th International Workshop on Graph-Theoretic Concepts in Computer Science (WG)*, p. 139-151, 2013.

121. W. Evans, S. Felsner, M. Kaufmann, S. Kobourov, D. Mondal, R. Nishat, K. Verbeek, "Table Cartograms," *21st European Symposium on Algorithms (ESA)*, p. 421-432, 2013.

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Software Tools

1. `DataFly`, an interactive system for embedding graphs in high-dimensional space and exploring 2D viewpoints into the data, `https://datafly.algo.cit.tum.de`
2. `MetroSets+`: Interactive software to visualize set systems using the metro map metaphor, `https://beta.metrosets.algo.cit.tum.de`
3. `GMap`: A Graph-based Map visualization tool, uses the geographic map metaphor to visualize relational or metric data, implemented and available in the graphviz package, `https://gmap.algo.cit.tum.de/`
4. `MetroSets`: Visualizing set systems (also known as hypergraphs) using the metro map metaphor, `https://metrosets.algo.cit.tum.de/`
5. `MPSE`: Multi-Perspective, Simultaneous Embedding (MPSE) allows one to visualize multiple relationships defined on the same set of objects, `http://mpse.arl.arizona.edu`
6. `Twitter4Food`: Analyzing the Language of Food on Social Media: different visualizations of a large Twitter food-related dataset, `https://sites.google.com/site/twitter4food/`
7. `MoCS`: Maps of Computer Science: MoCS provides a method to visualize concept maps of topics from the DBLP database of computer science research papers, `http://mocs.cs.arizona.edu`
8. `WordCloud`: A semantics-aware word-cloud visualization tool, using NLP tools to compute similarities and place related words close to each other, `http://wordcloud.cs.arizona.edu`
9. `GraphSET`: Graph Simultaneous Embedding Tool provides a practical way to study several types of problems in simultaneous embedding, `http://graphset.cs.arizona.edu`
10. `Lombardi`: Lombardi provides a spring embedder with circular arcs that are evenly spread out around each vertex, `http://lombardi.cs.arizona.edu`
11. `SMorph`: Tool for smooth, continuous, and intersection-free morphing of planar graph drawings on the surface of the sphere, `http://smorph.cs.arizona.edu`
12. `GRIP`: Graph Drawing with Intelligent Placement tool provides several efficient algorithms for visualizing large graphs in 2D and 3D Euclidean space, `http://grip.cs.arizona.edu`

13. TGRIP: Temporal Graph Drawing with Intelligent Placement tool can visualize large graphs that evolve over time, http://tgrip.cs.arizona.edu
14. GraphAEL: Graph Animations with Evolving Layouts visualizes large evolving graphs in Euclidean, Spherical, and Hyperbolic spaces, http://graphael.cs.arizona.edu
15. TetraTetris is a multi-user game and the first non-trivial application developed for the DiamondTouch table, http://tetratetris.cs.arizona.edu
16. DT is an interactive, multi-user application designed for the DiamondTouch table for discovering simultaneous planar graph embeddings, http://dt.cs.arizona.edu
17. GMorph is a system for smooth, continuous, and intersection-free morphing of planar graph drawings in 2D Euclidean space, http://gmorph.cs.arizona.edu
18. SimG is a system for simultaneously visualizing multiple graphs defined on a common set of vertices, http://simg.cs.arizona.edu

Patents

Y. Hu, E. Gansner, S. Kobourov, C. Volinsky, "Visualization and representation of data clusters and relations," US Patent 8,970,593, 2015

Grants

1. PI, *Algorithms for Geometric Graphs*, NSF-CCF, $800,000, 2022-2026
2. PI, *Multi-Level Graph Representation for Exploring Big Data*, NSF-CCF-DMS, $600,000, 2018-22
3. PI, *Algorithms for Geometric Graph Representations*, NSF-CCF, $450,000, 2017-21
4. co-PI, *UA-TRIPODS: Building Theoretical Foundations for Data Sciences*, NSF-CCF, $1,368,500, 2017-22
5. co-PI, *Data Science Pathways for a Vibrant TRIPODS Commons at Scale*, NSF-DMS, $200,000, 2018-21
6. PI, *Visualizing the Knowledge Landscape*, UA-ORD, $268,944, 2016-2018
7. co-PI, *T2 Diabetes Risk Detection via Machine Learning and Visualization*, UA-ORD, $97,356, 2017-2018
8. PI, *Geometry and Combinatorics of Intersections and Contacts*, NSF-CCF, $60,002, 2016-17
9. PI, *Putting Network Security on the Map*, Office of Naval Research, $4,157,490, 2011-16
10. PI, *ImageQuest: Calibrated Imaging and Validated Analysis*, NSF-IBIV, $1,268,593, 2010-13
11. PI, *CAREER: Embedding, Morphing, & Visualizing Dynamic Graphs*, NSF-CCF, $419,645, 2006-11
12. PI, *Algorithms for Visualizing Data with Contact Graphs*, NSF-CCF, $296,001, 2011-14
13. PI, *Visualization of Giga-Graphs and Graph Processes*, NSF-ACR, $240,358, 2002-05
14. PI, *Proportional Graph Visualization*, Alexander von Humboldt Foundation, $98,800, 2011-2013
15. PI, *Visualization of Giga-Graphs and Graph Processes*, NSF-REU Suppl., $42,500, 2002-05
16. co-PI, *Collaborative Mind-Mapping Solution to the Obesity Challenge*, USDA, $500,000, 2010-2012
17. co-PI, *Bootstrapping Broad-Coverage Network Services*, NSF-CNS, $94,000, 2004-05

Steering Committees, Scientific Directorates, Editorial Boards

Steering Committee Chair, International Symposium on Graph Drawing and Network Visualization (GD)
Steering Committee Member, German Computer Graphics and Visualization Society (GI FB GDV)
Member of the Scientific Directorate of Schloss Dagstuhl - Leibniz Center for Informatics
Editorial Board, IEEE Transactions on Visualization and Computer Graphics (TVCG)
Editorial Board, Journal of Computational Geometry, Theory and Applications (CGTA)
Editorial Board, Journal of Graph Algorithms and Applications (JGAA)

Program Chair

PC co-chair, 21st IEEE Pacific Visualization Symposium (PacificVis), Busan, Korea, 2027
Co-chair, Dagstuhl Seminar 250105, "Perception-Informed Network Visualization", Germany, 2026
Co-chair, Dagstuhl Seminar 216026, "Perception in Network Visualization", Germany, 2023

Co-chair, Dagstuhl Seminar 21152, "Multi-Level Graph Representation...", Germany, 2021
PC co-chair, 21st Conference on Algorithm Engineering and Experiments (ALENEX), San Diego, 2019
Co-chair, Dagstuhl Seminar 16452, "Beyond-Planar Graphs: Algorithmics and Combinatorics", Germany, 2016
Co-chair, Dagstuhl Seminar 13151, "Drawing Graphs and Maps with Curves", Germany, 2013
Co-chair, Dagstuhl Seminar 12261, "Putting Data on the Map", Germany, 2012
PC co-chair, 5th IEEE Pacific Visualization Symposium (PacificVis), Songdo, Korea, 2011
Co-chair, Dagstuhl Seminar 11191, "Graph Drawing with Algorithm Engineering Methods", Germany, 2011
Co-chair, Dagstuhl Seminar 08191, "Graph Drawing Applications to Bioinformatics and Social Sciences", 2008
Chair, 13th Annual Graph Drawing Contest Committee, Karlsruhe, Germany, 2006
Co-chair, Dagstuhl Seminar 05191, "Graph Drawing", Germany, 2005
Chair, 12th Annual Graph Drawing Contest Committee, Limerick, Ireland, 2005
Chair, 11th Annual Graph Drawing Contest Committee, New York, NY, 2004
PC co-chair, 10th International Symposium on Graph Drawing (GD), Irvine, CA, 2002

Program Committee Service

PC member, 40th AAAI Conference on Artificial Intelligence (AAAI), Montreal, Canada, 2027
PC member, IEEE VIS: Visualization and Visual Analytics (VIS), Boston, USA 2026
PC member, 40th AAAI Conference on Artificial Intelligence (AAAI), Singapore, 2026
PC member, 28th IEEE Eurographics Conference on Visualization (EuroVis), UK, 2026
PC member, 20th IEEE Pacific Visualization Symposium (PacificVis), Sydney, Australia, 2026
PC member, IEEE VIS: Visualization and Visual Analytics (VIS), Vienna, Austria 2025
PC member, 27th IEEE Eurographics Conference on Visualization (EuroVis), Luxembourg, 2025
PC member, 37th ACM/IEEE Supercomputing Conference (SC), St. Louis, MO, USA, 2025
PC member, 19th IEEE Pacific Visualization Symposium (PacificVis), Taipei, Taiwan, 2025
PC member, 33rd International Symposium on Graph Drawing (GD), Norrköping, Sweden, 2025
PC member, 27th Conference on Algorithm Engineering and Experiments (ALENEX), New Orleans, 2025
PC member, 32nd European Symposium on Algorithms (ESA), London, UK, 2024
PC member, 26th IEEE Eurographics Conference on Visualization (EuroVis), Odensee, Denmark, 2024
PC member, 18th IEEE Pacific Visualization Symposium (PacificVis), Tokyo, Japan, 2024
PC member, 7th International Workshop on Big Data Visual Exploration and Analytics (BigVis) at VLDB 2024
PC member, IEEE VIS: Visualization and Visual Analytics, Melbourne, Australia, 2023
PC member, 15th ACM Symposium of Eye Tracking Research & Applications (ETRA), Germany, 2023
PC member, 16th IEEE Pacific Visualization Symposium (PacificVis), Seoul, Korea, 2023
PC member, 49th Intl. Workshop on Graph-Theoretic Concepts in Computer Science (WG), Switzerland, 2023
PC member, IEEE VIS: Visualization and Visual Analytics, Oklahoma City, OK, 2022
PC member, 15th IEEE Pacific Visualization Symposium (PacificVis), Tsukuba, Japan, 2022
PC member, 30th International Symposium on Graph Drawing (GD), Tokyo, Japan, 2022
PC member, 16th Intl. Conference & Workshops on Algorithms and Computation (WALCOM), Indonesia, 2022
PC member, IEEE VIS: Visualization and Visual Analytics (VIS), New Orleans, LA, 2021
PC member, 1st SIAM Applied Computational & Discrete Algorithms (ACDA), Spokane, 2021
PC member, 13th IEEE Pacific Visualization Symposium (PacificVis), Tianjin, China, 2020
PC member, 35th Symposium on Computational Geometry (SoCG), Portland, 2019
PC member, 12th IEEE Pacific Visualization Symposium (PacificVis), Bangkok, Thailand, 2019
PC member, 11th ACM Symposium on Eye Tracking Research & Applications (ETRA), 2019
PC member, 21st IEEE Eurographics Conference on Visualization (EUROVIS), Lisbon, Portugal, 2019
PC member, 2nd Workshop on Big Data Visual Exploration and Analytics (BigVis), Lisbon, Portugal, 2019
PC member, 23rd IEEE Information Visualization Symposium (INFOVIS), Berlin, Germany, 2018
PC member, 20th IEEE Eurographics Conference on Visualization (EUROVIS), Brno, Czech Republic, 2018
PC member, IEEE Conference on Software Visualization (VISSOFT), Madrid, Spain, 2018
PC member, 26nd International Symposium on Graph Drawing (GD), Barcelona, Spain, 2018
PC member, 11th IEEE Pacific Visualization Symposium (PacificVis), Kobe, Japan, 2018
PC member, IEEE Visual Analytics Science and Technology Conference (VAST), Phoenix AZ, 2017
PC member, 19th IEEE Eurographics Conference on Visualization (EUROVIS), Barcelona, Spain, 2017
PC member, 10th IEEE Pacific Visualization Symposium (PacificVis), Seoul, Korea, 2017
PC member, 21th IEEE Information Visualization Symposium (INFOVIS), Baltimore, 2016

PC member, 18th IEEE Eurographics Conference on Visualization (EUROVIS), Groningen, Netherlands, 2016
PC member, 10th IEEE Pacific Visualization Symposium (PacificVis), Taipei, Taiwan, 2016
PC member, IEEE Conference on Software Visualization (VISSOFT), Raleigh, North Carolina, 2016
PC member, 24nd International Symposium on Graph Drawing (GD), Athens, 2016
PC member, 7th Intl. Conf. on Information, Intelligence, Systems and Applications (IISA), Greece, 2016
PC member, 21th IEEE Information Visualization Symposium (INFOVIS), Chicago, IL, 2015
PC member, 17th IEEE Eurographics Conference on Visualization (EUROVIS), Cagliari, Italy, 2015
PC member, 8th IEEE Pacific Visualization Symposium (PacificVis), Hangzhou, China, 2015
PC member, 20th IEEE Information Visualization Symposium (INFOVIS), Paris, France, 2014
PC member, 16th IEEE Eurographics Conference on Visualization (EuroVis), Swansea, UK, 2014
PC member, IEEE Conference on Software Visualization (VISSOFT), Victoria, BC, Canada, 2014
PC member, 22nd International Symposium on Graph Drawing (GD), Würzburg, Germany, 2014
PC member, 7th IEEE Pacific Visualization Symposium (PacificVis), Yokohama, Japan, 2014
PC member, IEEE Conference on Software Visualization (VISSOFT), Eindhoven, Netherlands, 2013
PC member, 23st Fall Workshop on Computational Geometry (FWCG), New York NY, 2013
PC member, 6th IEEE Pacific Visualization Symposium (PacificVis), Sydney, Australia, 2012
PC member, 20th International Symposium on Graph Drawing (GD), Seattle WA, 2012
PC member, 21st Fall Workshop on Computational Geometry (FWCG), New York NY, 2011
PC member, 18th International Symposium on Graph Drawing (GD), Konstanz, Germany, 2010
PC member, 7th ACM Symposium on Software Visualization (SOFTVIS), Salt Lake City UT, 2010
PC member, 16th European Symposium on Algorithms (ESA), Karlsruhe, Germany, 2008
PC member, 16th International Symposium on Graph Drawing (GD), Crete, Greece, 2008
PC member, 3rd International Conference on Human Computer Interaction, Innsbruck, Austria, 2008
PC member, 17th ACM-SIAM Symposium on Discrete Algorithms (SODA), Miami FL, 2006
PC member, 3rd ACM Symposium on Software Visualization (SOFTVIS), Brighton UK, 2006
PC member, 14th International Symposium on Graph Drawing (GD), Karlsruhe, Germany, 2006
PC member, 8th International Symposium on Graph Drawing (GD), Williamsburg, VA, 2000

Conference Committee Service

Organizer, NSF Postdoctoral Conference, Tucson, AZ, 2016
Organizing Committee, 22nd ACM Symposium on Computational Geometry, Sedona, AZ, 2006
Organizing Committee, 13th International Symposium on Graph Drawing, Limerick, Ireland, 2005
Organizing Committee, 12th International Symposium on Graph Drawing, New York, NY, 2004

PhD Advisees

Cesim Erten, "Simultaneous Embedding and Visualization of Graphs," April 2005
Alejandro Estrella-Balderramma, "Simultaneous Embedding and Level Planarity," April 2009
Joe Fowler, "Unlabeled Level Planarity," April 2009
Sankar Veeramoni, "How to Color a Map," December 2014
Jawaherul Alam, "Contact Representations of Graphs in 2D and 3D," May 2015
Sabrina Nusrat, "Cartogram Visualization: Methods, Applications, and Effectiveness," June 2017
Reyan Ahmed, "Multi-Level Graph Spanners," July 2021
Richard Spence, "Graph Sparsification with Priority," July 2021
Kathryn Gray, "Novel Techniques for Visulalization of Graphs and Trees," April 2024
Jacob Miller, "Generalizations of Stress-based Graph Layout to Non-Euclidean Geometries," April 2024
Matt Oddo, 3rd year PhD student
Timo Brand, 2nd year PhD student

Postdoctoral Advisees

Carsten Görg (PhD, Universität Trier), 2006
Katharina Zweig (PhD, Universität Tübingen), 2007
Michael Schulz (PhD, Universität zu Köln), 2008
Aparna Das (PhD, Brown University), 2010-2012
Thienne Johsnon (PhD, University of Sao Paulo, Brazil), 2011-2013
Joe Fowler (PhD, University of Arizona), 2011-2013

Sergey Pupyrev (PhD, Ural State University), 2013-2015
Paolo Simonetto (PhD, University of Bordeaux), 2013-2015
Iqbal Hossein (PhD, Bangladesh University of Engineering and Technology), 2016-2018
Felice De Luca (PhD, University of Perugia), 2018-2020
Keaton Hamm (PhD, Texas A&M University), 2018-2020
Radoslav Fulek (PhD, Ecole Polytechnique Federale de Lausanne), 2019-2020
Faryad Sahneh (PhD, Kansas State University), 2017-2020
Raymundo Navarrete (PhD, University of Michigan), 2018-2021
Vahan Huroyan (PhD, University of Minnesota), 2018-2022
Richard Spence (PhD, University of Arizona), 2021-2022
Miroslav Kryven (PhD, Universität Würzburg), 2021-2022
Henry Förster (PhD, Universität Tübingen), 2024-2026
Jacob Miller (PhD, University of Arizona), 2024–
Markus Wallinger (PhD, TU Wien), 2024–
Joannes Zink (PhD, Universität Würzburg), 2024–
Soeren Terziadis (PhD, TU Wien), 2025–

Courses Taught and Developed

Algorithmic Information Visualization (developed and taught at Arizona)
Analysis of Discrete Structures (developed and taught at Arizona)
Automata, Grammars and Languages (revised and taught at Arizona)
Concepts in Computing (revised and taught at Dartmouth)
Data Structures in C++ (revised and taught at Johns Hopkins University)
Design and Analysis of Algorithms (revised and taught at Arizona)
Experimental Algorithmics, or Making Algorithms Work (developed and taught at Arizona)
Fundamentals of Algorithms and Data Structures (developed and taught at Technical University Munich)
Geometric Representation of Graphs (developed and taught at Charles University)
Graph Theoretic Concepts in Computer Science (developed and taught at Arizona)
Graph Visualization: From Algorithms to Systems (developed and taught at Arizona)
Human Computer Interaction (developed and taught at Arizona)
Information Theory and Theory of Computation (developed and taught at Technical University Munich)
Introduction to Algorithms (revised and taught at Arizona)
Introduction to Data Visualization (developed and taught at Arizona)
Multi-Level Graph Representation (developed and taught at Arizona)
Operating Systems (revised and taught at Dartmouth)
Research Methods in Computer Science (developed and taught at the University of Botswana)
Theory of Computation (revised and taught at Arizona)