## References

- [1] James Abello, Steffen Hadlak, Heidrun Schumann, and Hans-Jörg Schulz. "A modular degree-of-interest specification for the visual analysis of large dynamic networks". *IEEE Transactions on Visualization and Computer Graphics*, 20(XX), 2014. doi:10.1109/TVCG.2013.109.
- [2] James Abello, Frank van Ham, and Neeraj Krishnan. "ASK-GraphView: a large scale graph visualization system". *IEEE Transactions on Visualization and Computer Graphics*, 12(5), pages 669–676, 2006. doi:10.1109/TVCG.2006.120.
- [3] Jae-Wook Ahn, Catherine Plaisant, and Ben Shneiderman. "A task taxonomy for network evolution analysis". Technical Report 2012/13, University of Maryland, 2012.
- [4] Aleks Aris and Ben Shneiderman. "Designing semantic substrates for visual network exploration". *Information Visualization*, 6(4), pages 281–300, 2007. doi:10.1057/palgrave.ivs.9500162.
- [5] David Auber, Yves Chiricota, Fabien Jourdan, and Guy Melançon. "Multiscale visualization of small world networks". In "Proceedings of the Ninth annual IEEE conference on Information visualization", pages 75–81. INFOVIS'03, IEEE Computer Society, Washington, DC, USA, 2003. ISBN 0-7803-8154-8.
- [6] Michael Balzer and Oliver Deussen. "Level-of-detail visualization of clustered graph layouts". In Seok-Hee Hong and Kwan-Liu Ma, editors, "Proceedings of the International Asia-Pacific Symposium on Visualization (APVIS'07)", pages 133–140. IEEE, 2007. ISBN 1-4244-0808-3. doi:10.1109/APVIS.2007.329288.
- [7] Kevin Buchin, Bettina Speckmann, and Kevin Verbeek. "Flow map layout via spiral trees". *IEEE Transactions on Visualization and Computer Graphics*, 17(12), pages 2536–2544, 2011. ISSN 1077-2626. doi:10.1109/TVCG.2011.202.
- [8] Stuart K. Card, Jock D. Mackinlay, and Ben Shneiderman, editors. Readings in information visualization: using vision to think. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 1999. ISBN 1-55860-533-9.
- [9] Weiwei Cui, Hong Zhou, Huamin Qu, Pak Chung Wong, and Xiaoming Li. "Geometry-based edge clustering for graph visualization". *IEEE*

- Transactions on Visualization and Computer Graphics, 14(6), pages 1277–1284, 2008. ISSN 1077-2626. doi:10.1109/TVCG.2008.135.
- [10] Timothy A. Davis and Yifan Hu. "The university of florida sparse matrix collection". *ACM Transactions on Mathematical Software*, 38(1), pages 1–25, 2011. doi:10.1145/2049662.2049663.
- [11] Peter Eades and Seok-Hee Hong. "How to draw a graph, revisited". In John Dill, Rae Earnshaw, David Kasik, John Vince, and Pak Chung Wong, editors, "Expanding the Frontiers of Visual Analytics and Visualization", pages 111–126. Springer, 2012. ISBN 978-1-4471-2803-8, 978-1-4471-2804-5. doi:10.1007/978-1-4471-2804-5\_7.
- [12] Peter Eades and Mao Lin Huang. "Navigating clustered graphs using force-directed methods". *Journal of Graph Algorithms and Applications*, 4(3), pages 157–181, 2000. doi:10.7155/jgaa.00029.
- [13] Geoffrey Ellis and Alan Dix. "The plot, the clutter, the sampling and its lens: occlusion measures for automatic clutter reduction". In Augusto Celentano and Piero Mussio, editors, "Proceedings of the Working Conference on Advanced Visual Interfaces (AVI'06)", pages 266–269. ACM Press, 2006. ISBN 1595933530. doi:10.1145/1133265.1133318.
- [14] Geoffrey Ellis and Alan Dix. "A taxonomy of clutter reduction for information visualisation". *IEEE Transactions on Visualization and Computer Graphics*, 13(6), pages 1216–1223, 2007. ISSN 1077-2626. doi:10.1109/TVCG.2007.70535.
- [15] Ozan Ersoy, Christophe Hurter, Fernando Paulovich, Gabriel Cantareiro, and Alex Telea. "Skeleton-based edge bundling for graph visualization". *IEEE Transactions on Visualization and Computer Graphics*, 17(12), pages 2364–2373, 2011. ISSN 1077-2626. doi:10.1109/TVCG. 2011.233.
- [16] Linton Freeman. "Visualizing social networks". Journal of Social Structure, 1(1), 2000.
- [17] George W. Furnas. "Generalized fisheye views". In "Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '86)", pages 16–23. ACM Press, 1986. doi:10.1145/22339.22342.
- [18] Emden Gansner, Yehuda Koren, and Stephen North. "Topological fisheye views for visualizing large graphs". *IEEE Transactions on*

- Visualization and Computer Graphics, 11(4), pages 457–468, 2005. doi:10.1109/TVCG.2005.66.
- [19] Emden R. Gansner, Yifan Hu, and Stephen Kobourov. "GMap: visualizing graphs and clusters as maps". In Stephen North, Han-Wei Shen, and Jarke J. van Wijk, editors, "Proceedings of the Pacific Visualization Symposium (PacificVis'10)", pages 201–208. IEEE, 2010. ISBN 978-1-4244-6685-6. doi:10.1109/PACIFICVIS.2010.5429590.
- [20] E.R. Gansner, Yifan Hu, S. North, and C. Scheidegger. "Multilevel agglomerative edge bundling for visualizing large graphs". In "Pacific Visualization Symposium (PacificVis), 2011 IEEE", pages 187–194. 2011. doi:10.1109/PACIFICVIS.2011.5742389.
- [21] Stefan Gladisch, Heidrun Schumann, and Christian Tominski. "Navigation recommendations for exploring hierarchical graphs". In "Advances in Visual Computing: Proceedings of the International Symposium on Visual Computing (ISVC'13)", Lecture Notes in Computer Science, Springer, 2013.
- [22] Steffen Hadlak, Hans-Jörg Schulz, and Heidrun Schumann. "In situ exploration of large dynamic networks". *IEEE Transactions on Visualization and Computer Graphics*, 17(12), pages 2334–2343, 2011. doi:10.1109/TVCG.2011.213.
- [23] Nathalie Henry, Jean-Daniel Fekete, and Michael J. McGuffin. "Nodetrix: a hybrid visualization of social networks". *IEEE Transactions on Visualization and Computer Graphics*, 13(6), pages 1302–1309, 2007. ISSN 1077-2626. doi:10.1109/TVCG.2007.70582.
- [24] Danny Holten. "Hierarchical edge bundles: Visualization of adjacency relations in hierarchical data". *IEEE Transactions on Visualization and Computer Graphics*, 12(5), pages 741–748, 2006. ISSN 1077-2626. doi:10. 1109/TVCG.2006.147.
- [25] Danny Holten and Jarke J. van Wijk. "Force-directed edge bundling for graph visualization". In "Proceedings of the 11th Eurographics / IEEE - VGTC conference on Visualization", pages 983–998. EuroVis'09, Eurographics Association, Aire-la-Ville, Switzerland, Switzerland, 2009. doi:10.1111/j.1467-8659.2009.01450.x.
- [26] Pili Hu and Wing Cheong Lau. "A survey and taxonomy of graph sampling". arXiv.org preprint 1308.5865, 2013.

- [27] C. Hurter, O. Ersoy, and A. Telea. "Graph bundling by kernel density estimation". *Comp. Graph. Forum*, 31(3pt1), pages 865–874, 2012. ISSN 0167-7055. doi:10.1111/j.1467-8659.2012.03079.x.
- [28] C. Hurter, O. Ersoy, and A. Telea. "Smooth bundling of large streaming and sequence graphs". In "Visualization Symposium (PacificVis), 2013 IEEE Pacific", pages 41–48. 2013. ISSN 2165-8765. doi:10.1109/PacificVis.2013.6596126.
- [29] Christophe Hurter, Alexandru Telea, and Ozan Ersoy. "Moleview: An attribute and structure-based semantic lens for large element-based plots". *IEEE Transactions on Visualization and Computer Graphics*, 17(12), pages 2600–2609, 2011. ISSN 1077-2626. doi:10.1109/TVCG. 2011.223.
- [30] Christophe Hurter, Benjamin Tissoires, and Stéphane Conversy. "Fromdady: Spreading aircraft trajectories across views to support iterative queries". *IEEE Transactions on Visualization and Computer Graphics*, 15(6), pages 1017–1024, 2009. ISSN 1077-2626. doi:10.1109/TVCG. 2009.145.
- [31] Daniel A Keim, Ming C Hao, Umeshwar Dayal, Halldor Janetzko, and Peter Bak. "Generalized scatter plots". *Information Visualization*, 9(4), pages 301–311, 2009. doi:10.1057/ivs.2009.34.
- [32] Eriola Kruja, Joe Marks, Ann Blair, and Richard Waters. "A short note on the history of graph drawing". In Petra Mutzel, Michael Jnger, and Sebastian Leipert, editors, "Proceedings of the Graph Drawing (GD'01)", Lecture Notes in Computer Science, volume 2265, pages 272–286. Springer, 2001. ISBN 978-3-540-43309-5. doi:10.1007/3-540-45848-4\_22.
- [33] A. Lambert, R. Bourqui, and D. Auber. "Winding roads: routing edges into bundles". In "Proceedings of the 12th Eurographics / IEEE VGTC conference on Visualization", pages 853–862. EuroVis'10, Eurographics Association, Aire-la-Ville, Switzerland, Switzerland, 2010. doi:10.1111/j.1467-8659.2009.01700.x.
- [34] Bongshin Lee, Catherine Plaisant, Cynthia Sims Parr, Jean-Daniel Fekete, and Nathalie Henry. "Task taxonomy for graph visualization". In Enrico Bertini, Catherine Plaisant, and Giuseppe Santucci, editors, "Proceedings of the AVI Workshop on BEyond time and errors: novel

- evaluation methods for information visualization (BELIV'06)", pages 1–5. ACM Press, 2006. ISBN 1-59593-562-2. doi:10.1145/1168149.1168168.
- [35] Sheng-Jie Luo, Chun-Liang Liu, Bing-Yu Chen, and Kwan-Liu Ma. "Ambiguity-free edge-bundling for interactive graph visualization". *Visualization and Computer Graphics, IEEE Transactions on*, 18(5), pages 810–821, 2012. ISSN 1077-2626. doi:10.1109/TVCG.2011.104.
- [36] Florian Mansmann and Svetlana Vinnik. "Interactive exploration of data traffic with hierarchical network maps". *IEEE Transactions on Visualization and Computer Graphics*, 12(6), pages 1440–1449, 2006. ISSN 1077-2626. doi:10.1109/TVCG.2006.98.
- [37] Quan Nguyen, Peter Eades, and Seok-Hee Hong. "Streameb: stream edge bundling". In "Proceedings of the 20th international conference on Graph Drawing", pages 400–413. GD'12, Springer-Verlag, Berlin, Heidelberg, 2013. ISBN 978-3-642-36762-5. doi:10.1007/978-3-642-36763-2\_36.
- [38] Dichao Peng, Neng Lu, Wei Chen, and Qunsheng Peng. "Sideknot: Revealing relation patterns for graph visualization". In "Proceedings of the 2012 IEEE Pacific Visualization Symposium", pages 65–72. PACIFICVIS '12, IEEE Computer Society, Washington, DC, USA, 2012. ISBN 978-1-4673-0863-2. doi:10.1109/PacificVis.2012.6183575.
- [39] Doantam Phan, Ling Xiao, Ron Yeh, Pat Hanrahan, and Terry Winograd. "Flow map layout". In "Proceedings of the Proceedings of the 2005 IEEE Symposium on Information Visualization", pages 29—. INFOVIS '05, IEEE Computer Society, Washington, DC, USA, 2005. ISBN 0-7803-9464-x. doi:10.1109/INFOVIS.2005.13.
- [40] Nathalie Henry Riche, Tim Dwyer, Bongshin Lee, and Sheelagh Carpendale. "Exploring the design space of interactive link curvature in network diagrams". In "Proceedings of the International Working Conference on Advanced Visual Interfaces", pages 506–513. AVI '12, ACM, New York, NY, USA, 2012. ISBN 978-1-4503-1287-5. doi:10.1145/2254556.2254652.
- [41] Hans-Jörg Schulz, Steffen Hadlak, and Heidrun Schumann. "Point-based visualization for large hierarchies". *IEEE Transactions on Visualization and Computer Graphics*, 17(5), pages 598–611, 2011. doi:10.1109/TVCG.2010.89.
- [42] Hans-Jörg Schulz and Heidrun Schumann. "Visualizing graphs a generalized view". In "Proceedings of the 10th International Conference on

- Information Visualisation (IV'06)", pages 166–173. IEEE, 2006. ISBN 0769526020. doi:10.1109/IV.2006.130.
- [43] David Selassie, Brandon Heller, and Jeffrey Heer. "Divided edge bundling for directional network data". *IEEE Transactions on Visualization and Computer Graphics*, 17(12), pages 2354–2363, 2011. ISSN 1077-2626. doi:10.1109/TVCG.2011.190.
- [44] A. Telea and O. Ersoy. "Image-based edge bundles: simplified visualization of large graphs". In "Proceedings of the 12th Eurographics / IEEE VGTC conference on Visualization", pages 843–852. EuroVis'10, Eurographics Association, Aire-la-Ville, Switzerland, Switzerland, 2010. doi:10.1111/j.1467-8659.2009.01680.x.
- [45] Christian Tominski, James Abello, Frank van Ham, and Heidrun Schumann. "Fisheye tree views and lenses for graph visualization". In "Proceedings of the conference on Information Visualization", pages 17–24. IV '06, IEEE Computer Society, Washington, DC, USA, 2006. ISBN 0-7695-2602-0. doi:10.1109/IV.2006.54.
- [46] Edward Tufte. The Visual Display of Quantitative Information. 2nd edition. Graphics Press, 1983.
- [47] William Thomas Tutte. "How to draw a graph". Proceedings of the London Mathematical Society, 13(3), pages 743–767, 1963. doi:10.1112/plms/s3-13.1.743.
- [48] F. van Ham and M. Wattenberg. "Centrality based visualization of small world graphs". In "Proceedings of the 10th Joint Eurographics / IEEE - VGTC conference on Visualization", pages 975–982. EuroVis'08, Eurographics Association, Aire-la-Ville, Switzerland, Switzerland, 2008. doi:10.1111/j.1467-8659.2008.01232.x.
- [49] Frank van Ham and Adam Perer. "Search, show context, expand on demand": Supporting large graph exploration with degree-of-interest". IEEE Transactions on Visualization and Computer Graphics, 15(6), pages 953–960, 2009. doi:10.1109/TVCG.2009.108.
- [50] Frank van Ham and Jarke J. van Wijk. "Interactive visualization of small world graphs". In "Proceedings of the IEEE Symposium on Information Visualization", pages 199–206. INFOVIS '04, IEEE Computer Society, Washington, DC, USA, 2004. ISBN 0-7803-8779-3. doi:10.1109/INFOVIS.2004.43.

- [51] Robert van Liere and Wim de Leeuw. "Graphsplatting: visualizing graphs as continuous fields". *IEEE Transactions on Visualization and Computer Graphics*, 9(2), pages 206–212, 2003. doi:10.1109/TVCG. 2003.1196007.
- [52] Duncan J. Watts. Small worlds: the dynamics of networks between order and randomness. Princeton University Press, Princeton, NJ, USA, 1999. ISBN 0-691-00541-9.
- [53] Nelson Wong, Sheelagh Carpendale, and Saul Greenberg. "Edgelens: an interactive method for managing edge congestion in graphs". In "Proceedings of the Ninth annual IEEE conference on Information visualization", pages 51–58. INFOVIS'03, IEEE Computer Society, Washington, DC, USA, 2003. ISBN 0-7803-8154-8.