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## Network analysis methods for smart inspection in the transport domain

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## References

- [1] L. A. Adamic and E. Adar. „Friends and neighbors on the web.” *Social Networks* 25.3 (2003), pages 211–230. doi: 10.1016/S0378-8733(03)00009-1.
- [2] A. Agrawal, R. Verschueren, S. Diamond, and S. Boyd. „A rewriting system for convex optimization problems.” *Journal of Control and Decision* 5.1 (2018), pages 42–60. doi: 10.1080/23307706.2017.1397554.
- [3] M. Al Hasan, V. Chaoji, S. Salem, and M. Zaki. „Link prediction using supervised learning.” In: *Proceedings of the 4th Workshop on Link Analysis, Counter-terrorism and Security*. 2006.
- [4] M. Al Hasan and M. J. Zaki. „A survey of link prediction in social networks.” In: *Social Network Data Analytics*. Springer, 2011, pages 243–275. doi: 10.1007/978-1-4419-8462-3\_9.
- [5] R. Albert and A.-L. Barabási. „Topology of evolving networks: Local events and universality.” *Physical Review Letters* 85 (2000), pages 5234–5237. doi: 10.1103/PhysRevLett.85.5234.
- [6] R. Albert and A.-L. Barabási. „Statistical mechanics of complex networks.” *Reviews of Modern Physics* 74 (1 2002), pages 47–97. doi: 10.1103/RevModPhys.74.47.
- [7] T. Aynaud. *python-louvain: Louvain algorithm for community detection*. Github repository. Dec. 27, 2020.  
<https://github.com/taynaud/python-louvain> (visited on Dec. 30, 2021).
- [8] R. Baeza-Yates and J. Matthews. *Statement on principles for responsible algorithmic systems*. 2022.  
<https://www.acm.org/binaries/content/assets/public-policy/final-joint-ai-statement-update.pdf> (visited on Dec. 23, 2022).
- [9] A.-L. Barabási. „The origin of bursts and heavy tails in human dynamics.” *Nature* 435 (2005), pages 207–211. doi: 10.1038/nature03459.
- [10] A.-L. Barabási. *Network science*. Cambridge University Press, 2016.  
<http://networksciencebook.com> (visited on Dec. 28, 2023).

- [11] A.-L. Barabási. *Love is all you need: Clauset’s fruitless search for scale-free networks*. Mar. 6, 2018.  
<https://web.archive.org/web/20210726203453/https://www.barabasilab.com/post/love-is-all-you-need> (visited on July 3, 2022).
- [12] A.-L. Barabási and R. Albert. „Emergence of scaling in random networks.” *Science* 286.5439 (1999), pages 509–512. doi: 10.1126/science.286.5439.509.
- [13] S. Barocas, M. Hardt, and A. Narayanan. *Fairness and machine learning: limitations and opportunities*. 2019.  
<http://www.fairmlbook.org>.
- [14] A. Barrat and C. Cattuto. „Temporal networks of face-to-face human interactions.” In: *Temporal Networks*. Springer, 2013, pages 191–216. doi: 10.1007/978-3-642-36461-7\_10.
- [15] B. Barzel and A.-L. Barabási. „Universality in network dynamics.” *Nature Physics* 9 (2013), pages 673–681. doi: 10.1038/nphys2741.
- [16] M. G. H. Bell and Y. Lida. *Transportation network analysis*. John Wiley & Sons, Ltd, 1997. doi: 10.1002/9781118903032.
- [17] C. M. Bishop. *Pattern recognition and machine learning*. Springer, 2006.
- [18] C. A. Bliss, M. R. Frank, C. M. Danforth, and P. S. Dodds. „An evolutionary algorithm approach to link prediction in dynamic social networks.” *Journal of Computational Science* 5.5 (2014), pages 750–764. doi: 10.1016/j.jocs.2014.01.003.
- [19] V. D. Blondel, J. L. Guillaume, R. Lambiotte, and E. Lefebvre. „Fast unfolding of communities in large networks.” *Journal of Statistical Mechanics: Theory and Experiment*, P10008 (2008). doi: 10.1088/1742-5468/2008/10/P10008.
- [20] M. Bloor, R. Datta, Y. Gilinskiy, and T. Horlick-Jones. „Unicorn among the cedars: On the possibility of effective “smart regulation” of the globalized shipping industry.” *Social & Legal Studies* 15.4 (2006), pages 534–551. doi: 10.1177/0964663906069546.
- [21] S. Boccaletti, V. Latora, Y. Moreno, M. Chavez, and D.-U. Hwang. „Complex networks: Structure and dynamics.” *Physics Reports* 424 (4–5 2006), pages 175–308. doi: 10.1016/j.physrep.2005.10.009.
- [22] J. Bollen, B. Gonçalves, G. Ruan, and H. Mao. „Happiness is assortative in online social networks.” *Artifical Life* 17 (3 2011), pages 237–251. doi: 10.1162/artl\_a\_00034.
- [23] P. Bonacich. „Power and centrality: a family of measures.” *American Journal of Sociology* 92.5 (1987), pages 1170–1182. doi: 10.1086/228631.
- [24] U. Brandes. „A faster algorithm for betweenness centrality.” *Journal of Mathematical Sociology* 25 (2 2001), pages 163–177. doi: 10.1080/0022250X.2001.9990249.
- [25] U. Brandes, P. Kenis, J. Lerner, and D. van Raaij. „Network analysis of collaboration structure in Wikipedia.” In: *Proceedings of the 18th International Conference on World Wide Web (WWW)*. 2009, pages 731–740. doi: 10.1145/1526709.1526808.
- [26] A. D. Broido and A. Clauset. „Scale-free networks are rare.” *Nature Communications* 10, 1017 (2019). doi: 10.1038/s41467-019-08746-5.

- [27] G. J. de Bruin. *Fair automated assessment of non-compliance in cargo ship networks*. Github repository. Nov. 25, 2021. doi: 10.5281/zenodo.5727085.
- [28] G. J. de Bruin. *Supervised temporal link prediction in large-scale real-world networks*. Github repository. Nov. 25, 2021. doi: 10.5281/zenodo.8067342.
- [29] G. J. de Bruin, A. Pereira Barata, C. J. Veenman, H. J. van den Herik, and F. W. Takes. „Fair automated assessment of non-compliance in cargo ship networks.” *EPJ Data Science* 11, 13 (2022). doi: 10.1140/epjds/s13688-022-00326-w.
- [30] G. J. de Bruin, C. J. Veenman, H. J. van den Herik, and F. W. Takes. „Understanding behavioral patterns in truck co-driving networks.” In: *Proceedings of the 7th International Conference on Complex Networks and Their Applications*. Studies in Computational Intelligence 813. Springer, 2018, pages 223–235. doi: 10.1007/978-3-030-05414-4\_18.
- [31] G. J. de Bruin, C. J. Veenman, H. J. van den Herik, and F. W. Takes. „Supervised temporal link prediction in large-scale real-world networks.” *Social Network Analysis and Mining* 11, 80 (2021). doi: 10.1007/s13278-021-00787-3.
- [32] G. J. de Bruin, C. J. Veenman, H. J. van den Herik, and F. W. Takes. „Understanding dynamics of truck co-driving networks.” In: *Proceedings of the 8th International Conference on Complex Networks and Their Applications*. Studies in Computational Intelligence 882. Springer, 2020, pages 140–151. doi: 10.1007/978-3-030-36683-4\_12.
- [33] G. J. de Bruin, C. J. Veenman, H. J. van den Herik, and F. W. Takes. „Experimental evaluation of train and test split strategies in link prediction.” In: *Proceedings of the 9th International Conference on Complex Networks and Their Applications*. Studies in Computational Intelligence 994. Springer, 2021, pages 79–91. doi: 10.1007/978-3-030-65351-4\_7.
- [34] E. Büütün, M. Kaya, and R. Alhajj. „A new topological metric for link prediction in directed, weighted and temporal networks.” In: *Proceedings of the International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*. 2016, pages 954–959. doi: 10.1109/ASONAM.2016.7752355.
- [35] E. Büütün, M. Kaya, and R. Alhajj. „Extension of neighbor-based link prediction methods for directed, weighted and temporal social networks.” *Information Sciences* 463–464 (2018), pages 152–165. doi: 10.1016/j.ins.2018.06.051.
- [36] P. Cariou, M. Q. Meijia Jr, and F.-C. Wolff. „An econometric analysis of deficiencies noted in port state control inspections.” *Maritime Policy & Management* 34.3 (2007), pages 243–258. doi: 10.1080/03088830701343047.
- [37] P. Cariou and F.-C. Wolff. „Do port state control inspections influence flag- and class-hopping phenomena in shipping?” *Journal of Transport Economics and Policy* 45.2 (2011), pages 155–177.
- [38] A. Casteigts, P. Flocchini, W. Quattrociocchi, and N. Santoro. „Time-varying graphs and dynamic networks.” *International Journal of Parallel, Emergent and Distributed Systems* 27 (5 2012), pages 387–408. doi: 10.1080/17445760.2012.668546.
- [39] G. C. Cawley and N. L. C. Talbot. „On over-fitting in model selection and subsequent selection bias in performance evaluation.” *The Journal of Machine Learning Research* 11 (2010), pages 2079–2107.

- [40] H. Chen, X. Li, and Z. Huang. „Link prediction approach to collaborative filtering.” In: *Proceedings of the 5th Joint Conference on Digital Libraries (JCDL)*. 2005, pages 141–142. DOI: 10.1145/1065385.1065415.
- [41] T. Chen and C. Guestrin. „XGBoost: A scalable tree boosting system.” In: *Proceedings of the 22nd International Conference on Knowledge Discovery and Data Mining (KDD)*. 2016, pages 785–794. DOI: 10.1145/2939672.2939785.
- [42] A. Criminisi, J. Shotton, and E. Konukoglu. „Decision forests: A unified framework for classification, regression, density estimation, manifold learning and semi-supervised learning.” *Foundations and Trends in Computer Graphics and Vision* 7.2–3 (2012), pages 81–227. DOI: 10.1561/0600000035.
- [43] B. R. da Cunha and S. Gonçalves. „Topology, robustness, and structural controllability of the Brazilian federal police criminal intelligence network.” *Applied Network Science* 3, 36 (2018). DOI: 10.1007/s41109-018-0092-1.
- [44] A. Cuttone, S. Lehmann, and M. C. González. „Understanding predictability and exploration in human mobility.” *EPJ Data Science* 7, 2 (2018). DOI: 10.1140/epjds/s13688-017-0129-1.
- [45] „Data in toezicht: Een pleidooi voor samenwerking.” *Toezicht* (Apr. 9, 2019). <https://www.toezicht.nl/data-in-toezicht-een-pleidooi-voor-samenwerking> (visited on May 29, 2023).
- [46] M. De Choudhury, H. Sundaram, A. John, and D. D. Seligmann. „Social synchrony: predicting mimicry of user actions in online social media.” In: *Proceedings of the International Conference on Computational Science and Engineering (CSE)*. 2009, pages 151–158. DOI: 10.1109/CSE.2009.439.
- [47] T. Degré. „The use of risk concept to characterize and select high risk vessels for ship inspections.” *WMU Journal of Maritime Affairs* 6 (2007), pages 37–49. DOI: 10.1007/BF03195088.
- [48] T. Degré. „From black-grey-white detention-based lists of flags to black-grey-white casualty-based lists of categories of vessels?” *Journal of Navigation* 61.3 (2008), pages 485–497. DOI: 10.1017/S0373463308004773.
- [49] Y. Dhote, N. Mishra, and S. Sharma. „Survey and analysis of temporal link prediction in online social networks.” In: *Proceedings of the International Conference on Advances in Computing, Communications and Informatics (ICACCI)*. 2013, pages 1178–1183. DOI: 10.1109/ICACCI.2013.6637344.
- [50] A. Divakaran and A. Mohan. „Temporal link prediction: A survey.” *New Generation Computing* 38 (2020), pages 213–258. DOI: 10.1007/s00354-019-00065-z.
- [51] P. S. Dodds, R. Muhamad, and D. J. Watts. „An experimental study of search in global social networks.” *Science* 301 (5634 2003), pages 827–829. DOI: 10.1126/science.1081058.
- [52] S. N. Dorogovtsev and J. F. F. Mendes. „Evolution of networks.” *Advances in Physics* 51.4 (2002), pages 1079–1187. DOI: 10.1080/00018730110112519.
- [53] C. Dwork, V. Feldman, M. Hardt, T. Pitassi, O. Reingold, and A. Roth. „Preserving statistical validity in adaptive data analysis.” In: *Proceedings of the 47th Annual Symposium on Theory of Computing (STOC)*. 2015, pages 117–126. DOI: 10.1145/2746539.2746580.

- [54] J. E. van Engelen, H. D. Boekhout, and F. W. Takes. „Explainable and efficient link prediction in real-world network data.” In: *Proceedings of the International Symposium on Intelligent Data Analysis (IDA)*. 2016, pages 295–307. doi: 10.1007/978-3-319-46349-0\_26.
- [55] European Maritime Safety Agency. *Netherlands*. 2021.  
<http://ems.a.europa.eu/about/download/6820/2614/23.html> (visited on Mar. 25, 2022).
- [56] European Union. „Directive 2009/16/EC of the European Parliament and of the Council of 23 April 2009 on port State control.” *Official Journal of the European Union* (Apr. 23, 2009).  
<http://data.europa.eu/eli/dir/2009/16/oj> (visited on Nov. 25, 2022).
- [57] M. Feldman, S. A. Friedler, J. Moeller, C. Scheidegger, and S. Venkatasubramanian. „Certifying and removing disparate impact.” In: *Proceedings of the 21th International Conference on Knowledge Discovery and Data Mining (KDD)*. 2015, pages 259–268. doi: 10.1145/2783258.2783311.
- [58] S. Fortunato and D. Hric. „Community detection in networks: A user guide.” *Physics Reports* 659 (2016), pages 1–44. doi: 10.1016/j.physrep.2016.09.002.
- [59] L. C. Freeman. „A set of measures of centrality based on betweenness.” *Sociometry* 40.1 (1977), pages 35–41. doi: 10.2307/3033543.
- [60] L. C. Freeman. „Centrality in social networks conceptual clarification.” *Social Networks* 1.3 (1978), pages 215–239.
- [61] Z. Gao, G. Lu, M. Liu, and M. Cui. „A novel risk assessment system for port state control inspection.” In: *Proceedings of the International Conference on Intelligence and Security Informatics (ISI)*. 2008, pages 242–244. doi: 10.1109/ISI.2008.4565068.
- [62] A. Ghasemian, H. HosseiniMardi, and A. Clauset. „Evaluating overfit and underfit in models of network community structure.” *IEEE Transactions on Knowledge and Data Engineering* 32.9 (2019), pages 1722–1735. doi: 10.1109/tkde.2019.2911585.
- [63] A. Ghasemian, H. HosseiniMardi, A. Galstyan, E. M. Airolidi, and A. Clauset. „Stacking models for nearly optimal link prediction in complex networks.” *Proceedings of the National Academy of Sciences* 117.38 (2019), pages 23393–23400. doi: 10.1073/pnas.1914950117.
- [64] M. Girvan and M. E. J. Newman. „Community structure in social and biological networks.” *Proceedings of the National Academy of Sciences* 99 (2002), pages 7821–7826. doi: 10.1073/pnas.122653799.
- [65] V. Gómez, A. Kaltenbrunner, and V. López. „Statistical analysis of the social network and discussion threads in Slashdot.” In: *Proceedings of the 17th International Conference on World Wide Web (WWW)*. 2008, pages 645–654. doi: 10.1145/1367497.1367585.
- [66] B. H. Good, Y.-A. de Montjoye, and A. Clauset. „Performance of modularity maximization in practical contexts.” *Physical Review E* 81, 046106 (4 2010). doi: 10.1103/PhysRevE.81.046106.
- [67] A. Graziano, P. Cariou, F.-C. Wolff, M. Q. Mejia, and J.-U. Schröder-Hinrichs. „Port state control inspections in the European Union: Do inspector’s number and background matter?” *Marine Policy* 88 (2018), pages 230–241. doi: 10.1016/j.marpol.2017.11.031.

- [68] J. Greene. „Amazon’s cloud-computing outage on wednesday was triggered by effort to boost system’s capacity.” *Washington Post* (Nov. 28, 2020). <https://www.washingtonpost.com/technology/2020/11/28/amazon-outage-explained/> (visited on Dec. 25, 2022).
- [69] J. L. Gross, J. Yellen, and P. Zhang. *Handbook of graph theory*. 2nd edition. CRC Press, 2014.
- [70] A. Grover and J. Leskovec. „node2vec: Scalable feature learning for networks.” In: *Proceedings of the 22nd International Conference on Knowledge Discovery and Data Mining (KDD)*. 2016, pages 855–864. DOI: 10.1145/2939672.2939754.
- [71] İ. Güneş, Ş. Gündüz-Öğüdücü, and Z. Çataltepe. „Link prediction using time series of neighborhood-based node similarity scores.” *Data Mining and Knowledge Discovery* 30.1 (2016), pages 147–180. DOI: 10.1007/s10618-015-0407-0.
- [72] A. Hagberg, P. Swart, and D. S Chult. *Exploring network structure, dynamics, and function using NetworkX*. U.S. Department of Energy, 2008. <https://www.osti.gov/biblio/960616> (visited on Dec. 28, 2021).
- [73] J. D. Hamilton. *Time series analysis*. Princeton University Press, 2020.
- [74] W. L. Hamilton, R. Ying, and J. Leskovec. „Representation learning on graphs: Methods and applications.” 2018. arXiv: 1709.05584 [cs.SI].
- [75] M. Hardt, E. Price, and N. Srebro. „Equality of opportunity in supervised learning.” In: *Proceedings of the 30th Conference on Neural Information Processing Systems (NIPS)*. Advances in Neural Information Processing Systems 29. 2016, pages 3315–3323.
- [76] T. Hastie, R. Tibshirani, and J. Friedman. *The elements of statistical learning: Data mining, inference, and prediction*. 2nd edition. Springer, 2009. DOI: 10.1007/b94608.
- [77] C. Heij and S. Knapp. „Shipping inspections, detentions, and incidents: An empirical analysis of risk dimensions.” *Maritime Policy & Management* 46.7 (2019), pages 866–883. DOI: 10.1080/03088839.2019.1647362.
- [78] T. Hiraoka, N. Masuda, A. Li, and H.-H. Jo. „Modeling temporal networks with bursty activity patterns of nodes and links.” *Physical Review Research* 2, 023073 (2020). DOI: 10.1103/PhysRevResearch.2.023073.
- [79] T. Hogg and K. Lerman. „Social dynamics of Digg.” *EPJ Data Science* 1, 5 (2012). DOI: 10.1140/epjds5.
- [80] P. W. Holland and S. Leinhardt. „Transitivity in structural models of small groups.” *Small Group Research* 2 (2 1971), pages 107–124. DOI: 10.1177/104649647100200201.
- [81] P. Holme. „Modern temporal network theory: a colloquium.” *The European Physical Journal B* 88, 234 (2015). DOI: 10.1140/epjb/e2015-60657-4.
- [82] P. Holme. „Rare and everywhere: perspectives on scale-free networks.” *Nature Communications* 10, 1016 (2019). DOI: 10.1038/s41467-019-09038-8.
- [83] P. Holme and J. Saramäki. „Temporal networks.” *Physics Reports* 519 (3 2012), pages 97–125. DOI: 10.1016/j.physrep.2012.03.001.

- [84] A. Holzinger, C. Biemann, C. S. Pattichis, and D. B. Kell. „What do we need to build explainable AI systems for the medical domain?” 2017. arXiv: 1712.09923 [cs.AI].
- [85] „Homogeneous temporal activity patterns in a large online communication space.” In: *Proceedings of the Workshop on Social Aspects of the Web (SAW)*. 2007. arXiv: 0708.1579 [cs.NI].
- [86] „ILT verbetert datagedreven toezicht met datalab.” *Toezine* (Sept. 26, 2017). <https://www.toezine.nl/artikel/228/ilt-verbetert-datagedreven-toezicht-met-datalab/> (visited on Nov. 25, 2022).
- [87] Inspectie Leefomgeving en Transport. *Jaarverslag ILT*. 2020. <https://magazines.ilent.nl/jaarverslag-ilt/2020/01/index> (visited on Mar. 24, 2022).
- [88] Inspectie Leefomgeving en Transport. *ILT-brede risicoanalyse*. 2021. <https://www.ilent.nl/documenten/rapporten/2021/09/21/ilt-brede-risicoanalyse-2021> (visited on Nov. 25, 2022).
- [89] Inspectie Leefomgeving en Transport. *ILT-brede risicoanalyse*. 2022. <https://www.ilent.nl/documenten/rapporten/2022/09/20/ilt-brede-risicoanalyse-2022> (visited on Nov. 25, 2022).
- [90] Inspectie Leefomgeving en Transport. *Over de ILT*. 2022. <https://www.ilent.nl/over-ilt> (visited on Apr. 15, 2022).
- [91] J. P. Ioannidis. „Why most published research findings are false.” *PLoS Med* 2.8, 124 (2018). DOI: 10.1371/journal.pmed.0020124.
- [92] M. Jacomy. „Epistemic clashes in network science: Mapping the tensions between idiographic and nomothetic subcultures.” *Big data & Society* 7 (2 2020). DOI: 10.1177/2053951720949577.
- [93] R. Jiang, A. Pacchiano, T. Stepleton, H. Jiang, and S. Chiappa. „Wasserstein fair classification.” In: *Proceedings of the 35th Uncertainty in Artificial Intelligence Conference (UAI)*. Proceedings of Machine Learning Research 115. 2020, pages 862–872.
- [94] P. Kaluza, A. Kölzsch, M. T. Gastner, and B. Blasius. „The complex network of global cargo ship movements.” *Journal of the Royal Society Interface* 7 (2010), pages 1093–1103. DOI: 10.1098/rsif.2009.0495.
- [95] V. Kissarnig, E. Mones, A. Bjerre-Nielsen, P. Sapiezynski, D. Dreyer Lassen, and S. Lehmann. „Academic performance and behavioral patterns.” *EPJ Data Science* 7, 10 (2018). DOI: 10.1140/epjds/s13688-018-0138-8.
- [96] J. Kleinberg, S. Mullainathan, and M. Raghavan. „Inherent trade-offs in the fair determination of risk scores.” 2016. arXiv: 1609.05807 [cs.LG].
- [97] B. Klimt and Y. Yang. „The Enron corpus: A new dataset for email classification research.” In: *Proceedings of the 15th European Conference on Machine Learning (ECML)*. Lecture Notes in Computer Science 3201. 2004, pages 217–226. DOI: 10.1007/978-3-540-30115-8\_22.
- [98] S. Knapp. „The econometrics of maritime safety.” PhD thesis. Erasmus University Rotterdam, Jan. 25, 2007. <http://hdl.handle.net/1765/7913> (visited on Dec. 28, 2021).

- [99] S. Knapp and P. H. Franses. „Econometric analysis to differentiate effects of various ship safety inspections.” *Marine Policy* 32.4 (2008), pages 653–662. DOI: j.marpol.2007.11.006.
- [100] G. Kossinets and D. J. Watts. „Empirical analysis of an evolving social network.” *Science* 311.5757 (2006), pages 88–90. DOI: 10.1126/science.1116869.
- [101] A. Kumar, S. S. Singh, K. Singh, and B. Biswas. „Link prediction techniques, applications, and performance: A survey.” *Physica A: Statistical Mechanics and its Applications* 553, 124289 (2020). DOI: 10.1016/j.physa.2020.124289.
- [102] S. Kumar, W. L. Hamilton, J. Leskovec, and D. Jurafsky. „Community interaction and conflict on the web.” In: *Proceedings of the World Wide Web Conference (WWW)*. 2018, pages 933–943. DOI: 10.1145/3178876.3186141.
- [103] S. Kumar, F. Spezzano, V. S. Subrahmanian, and C. Faloutsos. „Edge weight prediction in weighted signed networks.” In: *Proceedings of the 16th International Conference on Data Mining (ICDM)*. 2016, pages 221–230. DOI: 10.1109/ICDM.2016.175.
- [104] J. Kunegis. „KONECT: The Koblenz network collection.” In: *Proceedings of the 22nd International Conference on World Wide Web (WWW Companion)*. 2013, pages 1343–1350. DOI: 10.1145/2487788.2488173.
- [105] R. Lambiotte, J.-C. Delvenne, and M. Barahona. „Random walks, Markov processes and the multiscale modular organization of complex networks.” *IEEE Transactions on Network Science and Engineering* 1.2 (2014), pages 76–90. DOI: 10.1109/TNSE.2015.2391998.
- [106] J. Leskovec, J. Kleinberg, and C. Faloutsos. „Graph evolution: densification and shrinking diameters.” *ACM Transactions on Knowledge Discovery from Data* 1.1, 2 (2007). DOI: 10.1145/1217299.1217301.
- [107] J. Leskovec and A. Krevl. *SNAP datasets: Stanford large network dataset collection*. June 2014.  
<http://snap.stanford.edu/data> (visited on Dec. 28, 2021).
- [108] J. Leskovec, K. J. Lang, A. Dasgupta, and M. W. Majoney. „Statistical properties of community structure in large social and information networks.” In: *Proceedings of the 17th International conference on World Wide Web (WWW)*. 2008, pages 695–704. DOI: 10.1145/1367497.1367591.
- [109] M. Ley. „The DBLP computer science bibliography: Evolution, research issues, perspectives.” In: *Proceedings of the 9th International Symposium on String Processing and Information Retrieval (SPIRE)*. Lecture Notes in Computer Science 2476. 2002, pages 1–10. DOI: 10.1007/3-540-45735-6\_1.
- [110] D. Liben-Nowell and J. Kleinberg. „The link-prediction problem for social networks.” *Journal of the American Society for Information Science and Technology* 58.7 (2007), pages 1019–1031. DOI: 10.1002/asi.20591.
- [111] R. Lichtenwalter and N. V. Chawla. „Link prediction: Fair and effective evaluation.” In: *Proceedings of the 4th International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*. 2012, pages 376–383. DOI: 10.1109/ASONAM.2012.68.

- [112] R. N. Lichtenwalter, J. T. Lussier, and N. V. Chawla. „New perspectives and methods in link prediction.” In: *Proceedings of the 16th International Conference on Knowledge Discovery and Data Mining (KDD)*. 2010, pages 243–252. doi: 10.1145/1835804.1835837.
- [113] C. Liu, J. Wang, and H. Zhang. „Spatial heterogeneity of ports in the global maritime network detected by weighted ego network analysis.” *Maritime Policy & Management* 45.1 (2018), pages 89–104. doi: 10.1080/03088839.2017.1345019.
- [114] L. Lü and T. Zhou. „Link prediction in complex networks: A survey.” *Physica A: Statistical Mechanics and its Applications* 390.6 (2011), pages 1150–1170. doi: 10.1016/j.physa.2010.11.027.
- [115] M. Marjan, N. Zaki, and E. A. Mohamed. „Link prediction in dynamic social networks: a literature review.” In: *Proceedings of the 5th International Congress on Information Science and Technology (CIST)*. 2018, pages 200–207. doi: 10.1109/CIST.2018.8596511.
- [116] U. Mazureck and J. van Hattem. „Rewards for safe driving behavior: Influence on following distance and speed.” *Transportation Research Record* 1980.1 (2006), pages 31–38. doi: 10.1177/0361198106198000106.
- [117] W. McKinney. „Data structures for statistical computing in Python.” In: *Proceedings of the 9th Python in Science Conference (SciPy)*. 2010, pages 56–61.
- [118] R. Michalski, S. Palus, and P. Kazienko. „Matching organizational structure and social network extracted from email communication.” In: *Proceedings of the 14th International Conference on Business Information Systems (BIS)*. Lecture Notes in Business Information Processing 87. 2011. doi: 10.1007/978-3-642-21863-7\_17.
- [119] S. Milgram. „The small world problem.” *Psychology today* 2.1 (1967), pages 60–67.
- [120] T. Miller. „Explanation in artificial intelligence: insights from the social sciences.” *Aritificial Intelligence* 267 (2019), pages 1–38. doi: 10.1016/j.artint.2018.07.007.
- [121] Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. *Visie open overheid*. Sept. 2013. [https://data.overheid.nl/sites/default/files/uploaded\\_files/visie-open-overheid\\_kopie.pdf](https://data.overheid.nl/sites/default/files/uploaded_files/visie-open-overheid_kopie.pdf) (visited on May 27, 2022).
- [122] Ministerie van Justitie en Veiligheid. *Richtlijnen voor het toepassen van algoritmen door overheden en publieksvoorlichting over data-analyses*. Mar. 8, 2021. <https://www.rijksoverheid.nl/documenten/richtlijnen/2021/09/24/richtlijnen-voor-het-toepassen-van-algoritmen-door-overheden-en-publieksvoorlichting-over-data-analyses> (visited on May 28, 2022).
- [123] C. Molnar. *Interpretable machine learning*. 2020. <https://christophm.github.io/interpretable-ml-book> (visited on Dec. 28, 2021).
- [124] C. P. Muniz, R. Goldschmidt, and R. Choren. „Combining contextual, temporal and topological information for unsupervised link prediction in social networks.” *Knowledge-Based Systems* 156 (2018), pages 129–137. doi: 10.1016/j.knosys.2018.05.027.
- [125] E. C. Mutlu, T. A. Oghaz, A. Rajabi, and I. Garibay. „Review on graph feature learning and feature extraction techniques for link prediction.” *Machine Learning & Knowledge Extraction* 2.4 (2020), pages 672–704. doi: 10.3390/make2040036.

- [126] M. E. J. Newman. „Assortative mixing in networks.” *Physical Review Letters* 89, 208701 (2002). doi: 10.1103/PhysRevLett.89.208701.
- [127] M. E. J. Newman. „Mixing patterns in networks.” *Physical Review E* 67, 026126 (2 2003). doi: 10.1103/PhysRevE.67.026126.
- [128] M. E. J. Newman. „Modularity and community structure in networks.” *Proceedings of the National Academy of Sciences* 103.23 (2006), pages 8577–8582. doi: 10.1073/pnas.0601602103.
- [129] M. E. J. Newman. *Networks*. 2nd edition. Oxford University Press, 2018.
- [130] M. E. J. Newman and J. Park. „Why social networks are different from other types of networks.” *Physical Review E* 68, 036122 (3 2003). doi: 10.1103/PhysRevE.68.036122.
- [131] NGO Shipbreaking Platform. *Flags of Convience*. 2019.  
<https://shipbreakingplatform.org/issues-of-interest/focs/> (visited on Mar. 18, 2023).
- [132] R. Noldus and P. van Mieghem. „Assortativity in complex networks.” 3 (4 2015), pages 507–542. doi: 10.1093/comnet/cnv005.
- [133] J. O’Madadhain, J. Hutchins, and P. Smyth. „Prediction and ranking algorithms for event-based network data.” *ACM SIGKDD Explorations Newsletter* 7.2 (2005), pages 23–30. doi: 10.1145/1117454.1117458.
- [134] A. Öczan and Ş. G. Öğüdücü. „Multivariate temporal link prediction in evolving social networks.” In: *Proceedings of the 14th International Conference on Computer and Information Science (ICIS)*. 2015, pages 185–190. doi: 10.1109/ICIS.2015.7166591.
- [135] A. Öczan and Ş. G. Öğüdücü. „Supervised temporal link prediction using time series of similarity measures.” In: *Proceedings of the 9th International Conference on Ubiquitous and Future Networks (ICUFN)*. 2017, pages 519–521. doi: 10.1109/ICUFN.2017.7993838.
- [136] OECD. *Regulatory enforcement and inspections, OECD best practice principles for regulatory policy*. 2014. doi: 10.1787/23116013.
- [137] OECD. *Data-driven, information-enabled regulatory delivery*. 2021. doi: 10.1787/8f99ec8c-en.
- [138] J. Olsen. *Data quality: The accuracy dimension*. 2003.
- [139] T. Opsahl. „Triadic closure in two-mode networks: Redefining the global and local clustering coefficients.” *Social Networks* 35.2 (2013), pages 159–167. doi: 10.1016/j.socnet.2011.07.001.
- [140] T. M. Oshiro, P. S. Perez, and J. A. Baranauskas. „How many trees in a random forest?” In: *Proceedings of the 8th Machine Learning and Data Mining in Pattern Recognition (MLDM)*. Lecture Notes in Computer Science 7376. 2012, pages 154–168.
- [141] G. Pallotta, M. Vespe, and K. Bryan. „Vessel pattern knowledge discovery from AIS data: A framework for anomaly detection and route prediction.” *Entropy* 15.6 (2013), pages 2218–2245. doi: 10.3390/e15062218.
- [142] L. Pappalardo, S. Rinzivillo, Z. Qu, D. Pedreschi, and F. Giannotti. „Understanding the patterns of car travel.” *The European Physical Journal Special Topics* 215.6 (2013), pages 61–73. doi: 10.1140/epjst/e2013-01715-5.

- [143] A. Paranjape, A. R. Benson, and J. Leskovec. „Motifs in temporal networks.” In: *Proceedings of the 10th International Conference on Web Search and Data Mining (WSDM)*. 2017, pages 601–610. doi: 10.1145/3018661.3018731.
- [144] Pareshnab. *Zachary karate club social network*. Sept. 19, 2022.  
[https://en.wikipedia.org/wiki/File:Zachary\\_karate\\_club\\_social\\_network.png](https://en.wikipedia.org/wiki/File:Zachary_karate_club_social_network.png) (visited on Dec. 25, 2022).
- [145] Paris Memorandum of Understanding. *Current flag performance list*. Memorandum Appendix. 2020.  
<https://parismou.org/detentions-banning/white-grey-and-black-list> (visited on Nov. 25, 2021).
- [146] Paris Memorandum of Understanding. *Dealing with the pandemic*. Annual Report. 2020.  
[https://www.parismou.org/sites/default/files/TBB\\_Jaarverslag\\_Paris\\_MoU\\_2020\\_totaal\\_HRlos.pdf](https://www.parismou.org/sites/default/files/TBB_Jaarverslag_Paris_MoU_2020_totaal_HRlos.pdf) (visited on Mar. 28, 2022).
- [147] Paris Memorandum of Understanding. *Paris Memorandum of Understanding on Port State Control*. Oct. 2, 2020.  
[https://parismou.org/sites/default/files/Paris\\_MoU\\_including\\_43rd\\_amendment\\_final.pdf](https://parismou.org/sites/default/files/Paris_MoU_including_43rd_amendment_final.pdf) (visited on Mar. 10, 2022).
- [148] R. Pastor-Satorras and A. Vespignani. *Evolution and structure of the internet: a statistical physics approach*. Cambridge University Press, 2004.
- [149] F. Pedregosa et al. „Scikit-learn: Machine learning in Python.” *Journal of Machine Learning Research* 12, 85 (2011), pages 2825–2830.
- [150] L. Peel, T. P. Peixoto, and M. D. Domenico. „Statistical inference links data and theory in network science.” *Nature Communications* 13, 6794 (2022). doi: 10.1038/s41467-022-34267-9.
- [151] P. Peng, S. Cheng, J. Chen, M. Liao, L. Wu, X. Liu, and F. Lu. „A fine-grained perspective on the robustness of global cargo ship transportation networks.” *Journal of Geographical Sciences* 28 (2018), pages 881–889. doi: 10.1007/s11442-018-1511-z.
- [152] A. Pereira Barata. *Fair tree classifier using strong demographic parity*. Github repository. Nov. 16, 2021.  
[https://github.com/pereirabarataap/fair\\_tree\\_classifier](https://github.com/pereirabarataap/fair_tree_classifier) (visited on Dec. 30, 2021).
- [153] A. Pereira Barata. „Reliable and fair machine learning for risk assessment.” PhD thesis. Leiden University, Apr. 5, 2023.  
<https://hdl.handle.net/1887/3590289> (visited on May 29, 2023).
- [154] A. Pereira Barata, G. J. de Bruin, F. W. Takes, C. J. Veenman, and H. J. van den Herik. „Data-driven risk assessment in infrastructure networks.” In: *ICT.open*. 2018.  
<https://hdl.handle.net/1887/3283777> (visited on Apr. 29, 2022).
- [155] A. Pereira Barata, G. J. de Bruin, F. W. Takes, C. J. Veenman, and H. J. van den Herik. „Finding anomalies in waste transportation data with supervised category models.” In: *Proceedings of the 27th Belgian Dutch Conference on Machine Learning (BeNeLearn)*. Dec. 1, 2018.  
<https://hdl.handle.net/1887/69186> (visited on Mar. 29, 2022).

- [156] A. Pereira Barata, F. W. Takes, H. J. van den Herik, and C. J. Veenman. „Imputation methods outperform missing-indicator for data missing completely at random.” In: *Proceedings of the 19th International Conference on Data Mining Workshops (ICDMW)*. 2019, pages 407–414. DOI: 10.1109/ICDMW.2019.00066.
- [157] A. Pereira Barata, F. W. Takes, H. J. van den Herik, and C. J. Veenman. „Fair tree classifier using strong demographic parity.” 2021. arXiv: 2110.09295 [cs.LG].
- [158] B. Perozzi, R. Al-Rfou, and S. Skiena. „Deepwalk: online learning of social representations.” In: *Proceedings of the 20th International Conference on Knowledge Discovery and Data Mining (KDD)*. 2014, pages 701–710. DOI: 10.1145/2623330.2623732.
- [159] N. Poor. „Mechanisms of an online public sphere: the website Slashdot.” *Journal of Computer-Mediated Communication* 10, JCMC1028 (2 2005). DOI: 10.1111/j.1083-6101.2005.tb00241.x.
- [160] Port of Rotterdam. *Facts & figures*. 2021.  
<https://www.portofrotterdam.com/sites/default/files/2021-06/facts-and-figures-port-of-rotterdam.pdf> (visited on Mar. 24, 2022).
- [161] A. Potgieter, K. April, R. J. E. Cooke, and I. O. Osunmakinde. „Temporality in link prediction: understanding social complexity.” *All Sprouts Content*, 195 (2008).  
[https://aisel.aisnet.org/sprouts\\_all/195](https://aisel.aisnet.org/sprouts_all/195) (visited on Nov. 26, 2022).
- [162] P. Probst, M. N. Wright, and A.-L. Boulesteix. „Hyperparameters and tuning strategies for random forest.” *WIREs Data Mining and Knowledge Discovery* 9, e1301 (2019). DOI: 10.1002/widm.1301.
- [163] U. Redmond and P. Cunningham. „A temporal network analysis reveals the unprofitability of arbitrage in the prosper marketplace.” *Expert Systems with Applications* 40.9 (2013), pages 3715–3721. DOI: 10.1016/j.eswa.2012.12.077.
- [164] Y. Ren, M. Ercsey-Ravasz, P. Wang, M. C. González, and Z. Toroczkai. „Predicting commuter flows in spatial networks using a radiation model based on temporal ranges.” *Nature Communications* 5, 5347 (2014). DOI: 10.1038/ncomms6347.
- [165] M. Richardson, R. Agrawal, and D. Pedro. „Trust management for the semantic web.” In: *Proceedings of the 2nd International Semantic Web Conference (ISWC)*. Lecture Notes in Computer Science 2870. 2003. DOI: 10.1109/ICCEE.2009.241.
- [166] E. Rodríguez and F. Piniella. „The new inspection regime of the Paris MoU on port state control: improvement of the system.” *Journal of Maritime Research* 9.1 (2012), pages 9–16.
- [167] R. Roelofs, J. Miller, M. Hardt, S. Fridovich-keil, L. Schmidt, and B. Recht. „A meta-analysis of overfitting in machine learning.” In: *Proceedings of the 33rd International Conference on Neural Information Processing Systems (NeurIPS)*. Advances in Neural Information Processing Systems. 2019, 823, pages 9179–9189.
- [168] M. Romero, J. Finke, C. Rocha, and L. Tobón. „Spectral evolution with approximated eigenvalue trajectories for link prediction.” *Social Network Analysis and Mining* 10, 60 (2020). DOI: 10.1007/s13278-020-00674-3.
- [169] H. Rosling. *Factfulness*. Sceptre, 2018.

- [170] M. Saebi, J. Xu, L. M. Kaplan, B. Ribeiro, and N. V. Chawla. „Efficient modeling of higher-order dependencies in networks: From algorithm to application for anomaly detection.” *EPJ Data Science* 9, 15 (2020). doi: 10.1140/epjds/s13688-020-00233-y.
- [171] P. Sapiezynski, A. Stopczynski, R. Gatej, and S. Lehmann. „Tracking human mobility using WiFi signals.” *PloS ONE* 10.7, e0130824 (2015). doi: 10.1371/journal.pone.0130824.
- [172] I. Scholtes, N. Wider, and A. Garas. „Higher-order aggregate networks in the analysis of temporal networks: path structures and centralities.” *The European Physical Journal B* 89, 61 (2016). doi: 10.1140/epjb/e2016-60663-0.
- [173] J. Scott. „Social network analysis.” *Sociology* 22 (1 1988), pages 109–127. doi: 10.1177/0038038588022001007.
- [174] J. Scott. „Social network analysis: developments, advances, and prospects.” *Social network analysis and mining* 1 (2011), pages 21–26. doi: 10.1007/s13278-010-0012-6.
- [175] V. Sekara, A. Stopczynski, and S. Lehmann. „Fundamental structures of dynamic social networks.” *Proceedings of the National Academy of Sciences* 113.36 (2016), pages 9977–9982. doi: 10.1073/pnas.1602803113.
- [176] X. Q. Shuaian Wang Ran Yan. „Development of a non-parametric classifier: Effective identification, algorithm, and applications in port state control for maritime transportation.” *Transportation Research Part B: Methodological* 128 (2019), pages 129–157. doi: 10.1016/j.trb.2019.07.017.
- [177] P. R. da Silva Soares and R. B. C. Prudencio. „Time series based link prediction.” In: *Proceedings of the International Joint Conference on Neural Networks (IJCNN)*. 2012, pages 1–7. doi: 10.1109/IJCNN.2012.6252471.
- [178] P. R. Soares and R. B. Prudêncio. „Proximity measures for link prediction based on temporal events.” *Expert Systems with Applications* 40.16 (2013), pages 6652–6660. doi: 10.1016/j.eswa.2013.06.016.
- [179] A. Stopczynski, V. Sekara, P. Sapiezynski, A. Cuttome, M. M. Madsen, J. E. Larsen, and S. Lehmann. „Measuring large-scale social networks with high resolution.” *PloS ONE* 9.4, e95978 (2014). doi: 10.1371/journal.pone.0095978.
- [180] M. Stopford. *Maritime economics*. Routledge, 2008.
- [181] M. Strathern. „Improving ratings’: Audit in the British university system.” *European Review* 5.3 (1997), pages 305–321.
- [182] T. Strickx and J. Hartman. *Cloudflare outage on June 21, 2022*. June 21, 2022. <https://blog.cloudflare.com/cloudflare-outage-on-june-21-2022/> (visited on Dec. 25, 2022).
- [183] S. H. Strogatz. „Exploring complex networks.” *Nature* 410 (2001), pages 268–276. doi: 10.1038/35065725.
- [184] R. S. Sutton and A. G. Barto. *Reinforcement learning: an introduction*. 2nd edition. MIT Press, 2018.
- [185] F. W. Takes and W. A. Kosters. „Determining the diameter of small world networks.” In: *Proceedings of the 20th International Conference on Information and Knowledge Management (CIKM)*. 2011, pages 1191–1196. doi: 10.1145/2063576.2063748.

- [186] V. A. Traag, L. Waltman, and N. J. van Eck. „From Louvain to Leiden: Guaranteeing well-connected communities.” *Scientific Reports* 9, 5233 (2019). doi: 10.1038/s41598-019-41695-z.
- [187] S. Tsugawa, S. Jeschke, and S. Shladovers. „A review of truck platooning projects for energy savings.” *IEEE Transactions on Intelligent Vehicles* 1.1 (2016), pages 68–77. doi: 10.1109/TIV.2016.2577499.
- [188] S. Tsugawa and S. Kato. „Energy ITS: Another application of vehicular communications.” *IEEE Communications Magazine* 48.11 (2010), pages 120–126. doi: 10.1109/MCOM.2010.5621978.
- [189] T. Tylenda, R. Angelova, and S. Bedathur. „Towards time-aware link prediction in evolving social networks.” In: *Proceedings of the 3rd Workshop on Social Network Mining and Analysis (SNA-KDD)*. 2009, 9, pages 1–10. doi: 10.1145/1731011.1731020.
- [190] United Nations Conference on Trade and Development. *Review of maritime transport*. United Nations Publications, 2020.  
[https://unctad.org/system/files/official-document/rmt2020\\_en.pdf](https://unctad.org/system/files/official-document/rmt2020_en.pdf) (visited on Dec. 28, 2021).
- [191] P. Van Mieghem, H. Wang, X. Ge, S. Tang, and F. A. Kuipers. „Influence of assortativity and degree-preserving rewiring on the spectra of networks.” *European Physical Journal B* 76 (2010), pages 643–652. doi: 10.1140/epjb/e2010-00219-x.
- [192] N. van Veen. „The complex network of ship movements in Europe.” Master’s thesis. University of Amsterdam, July 2, 2020.  
<https://www.gerritjandebruin.nl/attachments/nathalie.pdf> (visited on Dec. 28, 2021).
- [193] P. Virtanen et al. „Scipy 1.0: fundamental algorithms for scientific computing in Python.” *Nature Methods* 17 (3 2020), pages 261–272. doi: 10.1038/s41592-019-0686-2.
- [194] B. Viswanath, A. Mislove, M. Cha, and K. P. Gummadi. „On the evolution of user interaction in Facebook.” In: *Proceedings of the 2nd Workshop on Online Social Networks (WOSN)*. 2009, pages 37–42. doi: 10.1145/1592665.1592675.
- [195] I. Voitalov, P. van der Hoorn, R. van der Hofstad, and D. Krioukov. „Scale-free networks well done.” *Physical Review Research* 1, 033034 (2019). doi: 10.1103/PhysRevResearch.1.033034.
- [196] D. Wang, D. Pedreschi, C. Song, F. Giannotti, and A.-L. Barabási. „Human mobility, social ties, and link prediction.” In: *Proceedings of the 17th International Conference on Knowledge Discovery and Data Mining (KDD)*. 2011, pages 1100–1108. doi: 10.1145/2020408.2020581.
- [197] D. J. Watts and S. H. Strogatz. „Collective dynamics of ‘small-world’ networks.” *Nature* 393 (1998), pages 440–442.
- [198] Wetenschappelijke raad voor het regeringsbeleid. *Vertrouwen in burgers*. 88. May 22, 2012.  
<https://www.wrr.nl/publicaties/rapporten/2012/05/22/vertrouwen-in-burgers> (visited on May 27, 2022).

- [199] Z. Whittaker. „A DNS outage just took down a large chunk of the internet.” *TechCrunch* (July 22, 2021). <https://techcrunch.com/2021/07/22/a-dns-outage-just-took-down-a-good-chunk-of-the-internet/> (visited on Dec. 25, 2022).
- [200] Wikileaks. *US democratic national committee leak*. July 22, 2016. <https://www.wikileaks.org/dnc-emails> (visited on Dec. 28, 2021).
- [201] Y. Xiao, G. Qi, M. Jin, K. F. Yuen, Z. Chen, and K. X. Li. „Efficiency of port state control inspection regimes: A comparative study.” *Transport Policy* 106 (2021), pages 165–172. doi: 10.1016/j.tranpol.2021.04.003.
- [202] Y. Xiao, G. Wang, K.-C. Lin, G. Qi, and K. X. Li. „The effectiveness of the new inspection regime for port state control: Application of the Tokyo MoU.” *Marine Policy* 115, 103857 (2020). doi: 10.1016/j.marpol.2020.103857.
- [203] J. Xu, T. L. Wickramarathne, and N. V. Chawla. „Representing higher-order dependencies in networks.” *Science Advances* 2, e1600028 (5 2016). doi: 10.1126/sciadv.1600028.
- [204] R.-F. Xu, Q. Lu, K. X. Li, and H.-S. Zheng. „A risk assessment system for improving port state control inspection.” In: *Proceedings of the 6th International Conference on Machine Learning and Cybernetics*. 2007, pages 818–823. doi: 10.1109/ICMLC.2007.4370255.
- [205] R. Xu, Q. Lu, K. Li, and W. Li. „Web mining for improving risk assessment in port state control inspection.” In: *Proceedings of the International Conference on Natural Language Processing and Knowledge Engineering*. 2007, pages 427–434. doi: 10.1109/NLPKE.2007.4368066.
- [206] R. Yan, S. Wang, and C. Peng. „An artificial intelligence model considering data imbalance for ship selection in port state control based on detention probabilities.” *Journal of Computational Science* 48, 101257 (2021). doi: 10.1016/j.jocs.2020.101257.
- [207] R. Yan, S. Wang, and C. Peng. „Ship selection in port state control: Status and perspectives.” *Maritime Policy & Management* 49 (4 2022), pages 600–615. doi: 10.1080/03088839.2021.1889067.
- [208] Y. Yang, N. V. Chawla, P. Basu, B. Prabhala, and T. La Porta. „Link prediction in human mobility networks.” In: *Proceedings of the International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*. 2013, pages 380–387. doi: 10.1145/2492517.2492656.
- [209] Y. Yang, R. N. Lichtenwalter, and N. V. Chawla. „Evaluating link prediction methods.” *Knowledge and Information Systems* 45.3 (2015), pages 751–782. doi: 10.1007/s10115-014-0789-0.
- [210] Z. Yang, Z. Yang, J. Yin, and Z. Qu. „A risk-based game model for rational inspections in port state control.” *Transportation Research Part E: Logistics and Transportation Review* 118 (2018), pages 477–495. doi: 10.1016/j.tre.2018.08.001.
- [211] H. Yin, A. R. Benson, J. Leskovec, and D. F. Gleich. „Local higher-order graph clustering.” In: *Proceedings of the 23rd International Conference on Knowledge Discovery and Data Mining (KDD)*. 2017, pages 555–564. doi: 10.1145/3097983.3098069.

- [212] P. Yu, Z. Wang, P. Wang, H. Yin, and J. Wang. „Dynamic evolution of shipping network based on hypergraph.” *Physica A: Statistical Mechanics and its Applications* 598, 127247 (2022). doi: 10.1016/j.physa.2022.127247.
- [213] W. W. Zachary. „An information flow model for conflict and fission in small groups.” *Journal of anthropological research* 33.4 (1977). doi: 10.1086/jar.33.4.3629752.
- [214] M. B. Zafar, I. Valera, M. G. Rogriguez, and K. P. Gummadi. „Fairness constraints: Mechanisms for fair classification.” In: *Proceedings of the 20th International Conference on Artificial Intelligence and Statistics*. Proceedings of Machine Learning Research 54. 2017, pages 962–970.
- [215] H. Zhuang, Y. Sun, J. Tang, J. Zhang, and X. Sun. „Influence maximization in dynamic social networks.” In: *Proceedings of the 13th International Conference on Data Mining (ICDM)*. 2013, pages 1313–1318. doi: 10.1109/ICDM.2013.145.



