

## References mentioned in the response

- [1] Judith Hermanns, Konstantinos Skitsas, Anton Tsitsulin, Marina Munkhoeva, Alexander Frederiksen Kyser, Simon Daugaard Nielsen, Alex Bronstein, Davide Mottin, and Panagiotis Karras. 2022. GRASP: Scalable Graph Alignment by Spectral Corresponding Functions. *ACM Transactions on Knowledge Discovery from Data (TKDD)* (2022).
- [2] Paris A Karakasis, Aritra Konar, and Nicholas D Sidiropoulos. 2021. Joint Graph Embedding and Alignment with Spectral Pivot. In *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery & Data Mining*. 851–859.
- [3] Ji Gao, Xiao Huang, and Jundong Li. 2021. Unsupervised graph alignment with wasserstein distance discriminator. In *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery & Data Mining*. 426–435.
- [4] Thanh Trung Huynh, Chi Thang Duong, Tam Thanh Nguyen, Vinh Van Tong, Abdul Sattar, Hongzhi Yin, and Quoc Viet Hung Nguyen. 2021. Network alignment with holistic embeddings. *IEEE Transactions on Knowledge and Data Engineering* (2021).
- [5] Xiyuan Chen, Mark Heimann, Fatemeh Vahedian, and Danai Koutra. 2020. Conealign: Consistent network alignment with proximity-preserving node embedding. In *Proceedings of the 29th ACM International Conference on Information & Knowledge Management*. 1985–1988.
- [6] Huynh Thanh Trung, Tong Van Vinh, Nguyen Thanh Tam, Hongzhi Yin, Matthias Weidlich, and Nguyen Quoc Viet Hung. 2020. Adaptive network alignment with unsupervised and multi-order convolutional networks. In *2020 IEEE 36th International Conference on Data Engineering (ICDE)*. IEEE, 85–96.
- [7] Soheil Feizi, Gerald Quon, Mariana Recamonde-Mendoza, Muriel Medard, Manolis Kellis, and Ali Jadbabaie. 2019. Spectral alignment of graphs. *IEEE Transactions on Network Science and Engineering* 7, 3 (2019), 1182–1197.
- [8] Mark Heimann, Haoming Shen, Tara Safavi, and Danai Koutra. 2018. Regal: Representation learning-based graph alignment. In *Proceedings of the 27th ACM international conference on information and knowledge management*. 117–126.
- [9] Si Zhang and Hanghang Tong. 2016. Final: Fast attributed network alignment. In *Proceedings of the 22nd ACM SIGKDD international conference on knowledge discovery and data mining*. 1345–1354.
- [10] Vikram Saraph and Tijana Milenković. 2014. MAGNA: maximizing accuracy in global network alignment. *Bioinformatics* 30, 20 (2014), 2931–2940.
- [11] J. Peng, H. Mittelman, and X. Li, “A new relaxation framework for quadratic assignment problems based on matrix splitting,” *Math. Program. Comput.*, vol. 2, no. 1, pp. 59–77, 2010.
- [12] Gunnar W Klau. 2009. A new graph-based method for pairwise global network alignment. *BMC bioinformatics* 10, 1 (2009), 1–9.
- [13] Chung-Shou Liao, Kanghao Lu, Michael Baym, Rohit Singh, and Bonnie Berger. 2009. IsoRankN: spectral methods for global alignment of multiple protein networks. *Bioinformatics* 25, 12 (2009), i253–i258.
- [14] Rohit Singh, Jinbo Xu, and Bonnie Berger. 2007. Pairwise global alignment of protein interaction networks by matching neighborhood topology. In *Annual international conference on research in computational molecular biology*. Springer, 16–31.
- [15] Shinji Umeyama. 1988. An eigendecomposition approach to weighted graph matching problems. *IEEE transactions on pattern analysis and machine intelligence* 10, 5 (1988), 695–703.
- [16] Huda Nassar, Nate Veldt, Shahin Mohammadi, Ananth Grama, and David F. Gleich. 2018. Low Rank Spectral Network Alignment. In *WWW*. 619–628.
- [17] Hongteng Xu, Dixin Luo, and Lawrence Carin. 2019. Scalable Gromov-Wasserstein Learning for Graph Partitioning and Matching. In *NeurIPS*. 3046–3056.
- [18] Zhou Fan, Cheng Mao, Yihong Wu, and Jiaming Xu. 2020. Spectral Graph Matching and Regularized Quadratic Relaxations: Algorithm and Theory. In *ICML (Proceedings of Machine Learning Research, Vol. 119)*. 2985–2995.
- [19] T. Man, H. Shen, S. Liu, X. Jin, and X. Cheng, “Predict anchor links across social networks via an embedding approach,” in *IJCAI*, 2016, pp. 1823–1829.
- [20] L. Liu, W. K. Cheung, X. Li, and L. Liao, “Aligning users across social networks using network embedding,” in *IJCAI*, 2016, pp. 1774–1780.
- [21] D. Koutra, H. Tong, and D. Lubensky, “Big-align: Fast bipartite graph alignment,” in *ICDM*, 2013, pp. 389–398.
- [22] Mohsen Bayati, Margot Gerritsen, David F Gleich, Amin Saberi, and Ying Wang. 2009. Algorithms for large, sparse network alignment problems. In *2009 Ninth IEEE International Conference on Data Mining*. IEEE, 705–710.
- [23] X. Du, J. Yan, et al. “Joint Link Prediction and Network Alignment via Cross-graph Embedding”. In: *IJCAI*. 2019, pp. 2251–2257.
- [24] Kalaev M, Bafna V, Sharan R. 2008. Fast and accurate alignment of multiple protein networks. *Research in Computational Molecular Biology: 12th Annual International Conference, RECOMB 2008*, 246–256.
- [25] M. El-Kebir, J. Heringa, and G. W. Klau, “Natalie 2.0: Sparse global network alignment as a special case of quadratic assignment,” *Algorithms*, vol. 8, no. 4, pp. 1035–1051, 2015.
- [26] R. Patro and C. Kingsford, “Global network alignment using multiscale spectral signatures,” *Bioinformatics*, vol. 28, no. 23, pp. 3105–3114, 2012.
- [27] Flannick J, Novak A, Do C B, et al. 2008. Automatic parameter learning for multiple network alignment. In *Research in Computational Molecular Biology*. Vol. 4955, *Lecture Notes in Computer Science*, Springer, Berlin/Heidelberg, pp. 214–231.
- [28] Kuchaiev, O., & Pržulj, N. (2011). Integrative network alignment reveals large regions of global network similarity in yeast and human. *Bioinformatics*, 27(10), 1390–1396.
- [29] Skitsas, K., Orłowski, K., Hermanns, J., Mottin, D., Karras, P., 2023. Comprehensive Evaluation of Unrestricted Graph Alignment Algorithms. <https://doi.org/10.48786/EDBT.2023.21>
- [30] <http://dblp.uni-trier.de>.
- [31] <http://www.yelp.com/datasetchallenge/>.
- [32] <http://jmcauley.ucsd.edu/data/amazon>.
- [33] <https://wiki.nci.nih.gov/display/NCIDTPdata/AIDS+Antiviral+Screen+Data>