

REFERENCES

- [1] Vinti Agarwal and Kamal K Bharadwaj. 2011. Trust-enhanced recommendation of friends in web based social networks using genetic algorithms to learn user preferences. In *International Conference on Computational Science, Engineering and Information Technology*. 476–485.
- [2] J Ignacio Alvarez-Hamelin, Luca Dall'Asta, Alain Barrat, and Alessandro Vespignani. 2006. Large scale networks fingerprinting and visualization using the k-core decomposition. In *Advances in neural information processing systems*. 41–50.
- [3] Kshipra Bhawalkar, Jon Kleinberg, Kevin Lewi, Tim Roughgarden, and Aneesh Sharma. 2015. Preventing unraveling in social networks: the anchored k-core problem. *SIAM Journal on Discrete Mathematics* 29, 3 (2015), 1452–1475.
- [4] Yulin Che, Zhuohang Lai, Shixuan Sun, Yue Wang, and Qiong Luo. 2020. Accelerating truss decomposition on heterogeneous processors. *Proceedings of the VLDB Endowment* 13, 10 (2020), 1751–1764.
- [5] Pei-Ling Chen, Chung-Kuang Chou, and Ming-Syan Chen. 2014. Distributed algorithms for k-truss decomposition. In *IEEE International Conference on Big Data*. 471–480.
- [6] Rajesh Chitnis and Nimrod Talmon. 2018. Can we create large k-cores by adding few edges?. In *International Computer Science Symposium in Russia*. 78–89.
- [7] Jonathan Cohen. 2008. Trusses: Cohesive subgraphs for social network analysis. *National security agency technical report* 16 (2008), 3–29.
- [8] Federico Corò, Gianlorenzo D'Angelo, and Cristina M Pinotti. 2020. Adding Edges for Maximizing Weighted Reachability. *Algorithms* 13, 3 (2020), 68.
- [9] Safaa Diab, Mhd Ghaith Olabi, and Izzat El Hajj. 2020. KTRussExPLORER: Exploring the Design Space of K-truss Decomposition Optimizations on GPUs. In *IEEE High Performance Extreme Computing Conference*. 1–8.
- [10] Yon Dourisboure, Filippo Geraci, and Marco Pellegrini. 2007. Extraction and classification of dense communities in the web. In *WWW*. 461–470.
- [11] Soroush Ebadian and Xin Huang. 2019. Fast algorithm for k-truss discovery on public-private graphs. *IJCAI* (2019), 2258–2264.
- [12] Fatemeh Esfahani, Jian Wu, Venkatesh Srinivasan, Alex Thomo, and Kui Wu. 2019. Fast Truss Decomposition in Large-scale Probabilistic Graphs.. In *EDBT*. 722–725.
- [13] Facebook. 2020. How does facebook suggest friends for me? <https://www.facebook.com/help/1059270337766380> (2020).
- [14] Eugene Fratkín, Brian T Naughton, Douglas L Brutlag, and Serafim Batzoglou. 2006. MotifCut: regulatory motifs finding with maximum density subgraphs. *Bioinformatics* 22, 14 (2006), e150–e157.
- [15] Zakariya Ghalmane, Mohammed El Hassouni, Chantal Cherifi, and Hocine Cherifi. 2018. K-truss decomposition for modular centrality. In *IEEE International Symposium on Signal, Image, Video and Communications*. 241–248.
- [16] Olivier Goldschmidt, David Nehme, and Gang Yu. 1994. Note: On the set-union knapsack problem. *Naval Research Logistics (NRL)* 41, 6 (1994), 833–842.
- [17] Jinbin Huang, Xin Huang, and Jianliang Xu. 2021. Truss-based Structural Diversity Search in Large Graphs. *TKDE* (2021).
- [18] Sitao Huang, Mohamed El-Hadedy, Cong Hao, Qin Li, Vikram S Mailthody, Ketan Date, Jinjun Xiong, Deming Chen, Rakesh Nagi, and Wen-mei Hwu. 2018. Triangle counting and truss decomposition using fpga. In *IEEE High Performance Extreme Computing Conference*. 1–7.
- [19] Xin Huang, Hong Cheng, Lu Qin, Wentao Tian, and Jeffrey Xu Yu. 2014. Querying k-truss community in large and dynamic graphs. In *Proceedings of the 2014 ACM SIGMOD international conference on Management of data*. 1311–1322.
- [20] Xin Huang and Laks VS Lakshmanan. 2017. Attribute-driven community search. *Proceedings of the VLDB Endowment* 10, 9 (2017), 949–960.
- [21] Xin Huang, Laks VS Lakshmanan, and Jianliang Xu. 2019. *Community Search over Big Graphs*. Morgan & Claypool Publishers.
- [22] Xin Huang, Wei Lu, and Laks VS Lakshmanan. 2016. Truss decomposition of probabilistic graphs: Semantics and algorithms. In *SIGMOD*. 77–90.
- [23] Di Jin, Cuiying Huo, Chungong Liang, and Liang Yang. 2021. Heterogeneous Graph Neural Network via Attribute Completion. In *Proceedings of the Web Conference 2021*. 391–400.
- [24] Di Jin, Zhizhi Yu, Pengfei Jiao, Shirui Pan, Philip S Yu, and Weixiong Zhang. 2021. A survey of community detection approaches: From statistical modeling to deep learning. *arXiv preprint arXiv:2101.01669* (2021).
- [25] Humayun Kabir and Kamesh Madduri. 2017. Shared-memory graph truss decomposition. In *IEEE International Conference on High Performance Computing*. 13–22.
- [26] Richard M Karp. 1972. Reducibility among combinatorial problems. In *Complexity of computer computations*. Springer, 85–103.
- [27] Ricky Laishram, Ahmet Erdem Sar, Tina Eliassi-Rad, Ali Pinar, and Sucheta Soundarajan. 2020. Residual Core Maximization: An Efficient Algorithm for Maximizing the Size of the k-Core. In *SDM*. 325–333.
- [28] Jure Leskovec and Andrej Krevl. 2014. SNAP Datasets: Stanford Large Network Dataset Collection. <http://snap.stanford.edu/data>.
- [29] Penghang Liu and A Erdem Sariyuce. 2020. Characterizing and Utilizing the Interplay Between Core and Truss Decompositions. (2020), 957–962.
- [30] Qing Liu, Minjun Zhao, Xin Huang, Jianliang Xu, and Yunjun Gao. 2020. Truss-based community search over large directed graphs. In *Proceedings of the 2020 ACM SIGMOD International Conference on Management of Data*. 2183–2197.
- [31] Sourav Medya, Tiyan Ma, Arlei Silva, and Ambuj Singh. 2020. K-core minimization: A game theoretic approach. *IJCAI* (2020), 3473–3479.
- [32] Rafael T Mikolajczyk and Mirjam Kretzschmar. 2008. Collecting social contact data in the context of disease transmission: prospective and retrospective study designs. *Social Networks* 30, 2 (2008), 127–135.
- [33] Robert J Mokken et al. 1979. Cliques, clubs and clans. *Quality & Quantity* 13, 2 (1979), 161–173.
- [34] Ryan A. Rossi and Nesreen K. Ahmed. 2015. The Network Data Repository with Interactive Graph Analytics and Visualization. In *AAAI*. <http://networkrepository.com>
- [35] Ryan A Rossi, David F Gleich, and Assefaw H Gebremedhin. 2015. Parallel maximum clique algorithms with applications to network analysis. *SIAM Journal on Scientific Computing* 37, 5 (2015), C589–C616.
- [36] Rahmtin Rotabi, Krishna Kamath, Jon Kleinberg, and Aneesh Sharma. 2017. Detecting strong ties using network motifs. In *WWW Companion*. 983–992.
- [37] Ahmet Erdem Sariyuce, C Seshadhri, and Ali Pinar. 2017. Parallel local algorithms for core, truss, and nucleus decompositions. *arXiv.org e-Print archive*, <https://arxiv.org/abs/1704.00386> (2017).
- [38] Ahmet Erdem Sariyuce, C Seshadhri, Ali Pinar, and Umit V Catalyurek. 2015. Finding the hierarchy of dense subgraphs using nucleus decompositions. In *WWW*. 927–937.
- [39] Stephen B Seidman and Brian L Foster. 1978. A graph-theoretic generalization of the clique concept. *Journal of Mathematical sociology* 6, 1 (1978), 139–154.
- [40] Zitan Sun, Xin Huang, Jianliang Xu, and Francesco Bonchi. 2021. Efficient probabilistic truss indexing on uncertain graphs. In *Proceedings of the Web Conference 2021*. 354–366.
- [41] Jia Wang and James Cheng. 2012. Truss decomposition in massive networks. *Proceedings of the VLDB Endowment* 5, 9 (2012).
- [42] Qianqian Xu, Jiechao Xiong, Xiaochun Cao, Qingming Huang, and Yuan Yao. 2018. From social to individuals: a parsimonious path of multi-level models for crowdsourced preference aggregation. *IEEE transactions on pattern analysis and machine intelligence* 41, 4 (2018), 844–856.
- [43] Yixing Yang, Yixiang Fang, Xuemin Lin, and Wenjie Zhang. 2020. Effective and efficient truss computation over large heterogeneous information networks. In *ICDE*. 901–912.
- [44] Ting Yuan, Jian Cheng, Xi Zhang, Qingshan Liu, and Hanqing Lu. 2015. How friends affect user behaviors? An exploration of social relation analysis for recommendation. *Knowledge-Based Systems* 88 (2015), 70–84.
- [45] Baichuan Zhang, Tanay Kumar Saha, and Mohammad Al Hasan. 2014. Name disambiguation from link data in a collaboration graph. In *ASONAM*. 81–84.
- [46] Fan Zhang, Conggai Li, Ying Zhang, Lu Qin, and Wenjie Zhang. 2018. Finding critical users in social communities: The collapsed core and truss problems. *IEEE Transactions on Knowledge and Data Engineering* 32, 1 (2018), 78–91.
- [47] Fan Zhang, Wenjie Zhang, Ying Zhang, Lu Qin, and Xuemin Lin. 2017. OLAK: an efficient algorithm to prevent unraveling in social networks. *Proceedings of the VLDB Endowment* 10, 6 (2017), 649–660.
- [48] Fan Zhang, Ying Zhang, Lu Qin, Wenjie Zhang, and Xuemin Lin. 2018. Efficiently reinforcing social networks over user engagement and tie strength. In *2018 IEEE 34th International Conference on Data Engineering (ICDE)*. IEEE, 557–568.
- [49] Yikai Zhang and Jeffrey Xu Yu. 2019. Unboundedness and efficiency of truss maintenance in evolving graphs. In *SIGMOD*. 1024–1041.
- [50] Feng Zhao and Anthony KH Tung. 2012. Large scale cohesive subgraphs discovery for social network visual analysis. *Proceedings of the VLDB Endowment* 6, 2 (2012), 85–96.
- [51] Zhongxin Zhou, Fan Zhang, Xuemin Lin, Wenjie Zhang, and Chen Chen. 2019. K-Core Maximization: An Edge Addition Approach.. In *IJCAI*. 4867–4873.
- [52] Weijie Zhu, Chen Chen, Xiaoyang Wang, and Xuemin Lin. 2018. K-core minimization: An edge manipulation approach. In *CIKM*. 1667–1670.
- [53] Weijie Zhu, Mengqi Zhang, Chen Chen, Xiaoyang Wang, Fan Zhang, and Xuemin Lin. 2019. Pivotal relationship identification: the K-truss minimization problem. In *IJCAI*. 4874–4880.