



DAFTAR PUSTAKA

- [1] A. Ramzy, M. Toriki, M. Abdeen, O. Saif, M. ElNainay, A. Alshantiti, and E. Nabil, "Hadiths classification using a novel author-based hadith classification dataset (abcd)," *Big Data and Cognitive Computing*, vol. 7, no. 3, 2023. [Online]. Available: <https://www.mdpi.com/2504-2289/7/3/141>
- [2] S. Subhan, "Kritik sanad," *Al-Majaalis: Jurnal Dirasat Islamiyah*, vol. 1, no. 1, pp. 25–46, November 2013. [Online]. Available: <https://doi.org/10.37397/almajaalis.v1i1>
- [3] M. ibn al Hajjaj, *Sahih Muslim: Muqaddimah*, 875, introduction 26.
- [4] M. ibn İsa al Tirmidhi, *Sunan al-Tirmidhi*. Beirut: Dar al-Gharb al-Islami, 1998, hadith no. 2378, dinilai Hasan gharib oleh al-Tirmidhi, dihasankan oleh al-Albani dalam Sahih Sunan al-Tirmidhi.
- [5] M. Soim and F. A. Aziz, "Dinamika qira'atologi: Menelaah perbedaan qira'ah mutawatir dan syadz serta pandangan ulama tentang rukunnya," *Jurnal Al-Munir*, vol. 6, no. 2, Jul–Dec 2024, pendidikan Kader Ulama Masjid Istiqlal. [Online]. Available: <https://doi.org/10.24239/al-munir.v6i2.985>
- [6] D. Prihambodo, "Research procedures and validity criteria for sanad hadith," *TAJDID*, 2024.
- [7] J. Makhlouta and H. Harkous, "Aubsarf: Compositional non-deterministic finite-state automata for arabic morphological analysis," 01 2010.
- [8] A. M. Azmi and N. bin Badia, "itree - automating the construction of the narration tree of hadiths (prophetic traditions)," in *Proceedings of the IEEE Sixth International Conference on Natural Language Processing and Knowledge Engineering (NLP-KE '10)*, 2010, pp. 1–7.
- [9] A. Azmi and N. AlBadia, "Mining and visualizing the narration tree of hadiths (prophetic traditions)," in *Cross-Disciplinary Advances in Applied Natural Language Processing: Issues and Approaches*. Hershey, Pennsylvania: IGI Global, 2012.
- [10] A. M. Azmi and N. bin Badia, "An application for creating an ontology of hadiths narration tree semantically and graphically," *Arabian Journal for Science and Engineering*, vol. 35, no. 2C, pp. 51–68, 2010.
- [11] Z. Shukur, N. Fabil, J. Salim, and S. A. Noah, "Visualization of the hadith chain of narrators," in *Proceedings of the International Visual Informatics Conference*. Springer, 2011, pp. 340–347.
- [12] F. Zaraket and J. Makhlouta, "Arabic cross-document nlp for the hadith and biography literature," in *Proceedings of the 25th International Florida Artificial Intelligence Research Society Conference (FLAIRS)*, Marco Island, Florida, 2012.
- [13] M. A. Siddiqui, M. Saleh, and A. A. Bagais, "Extraction and visualization of the chain of narrators from hadiths using named entity recognition and classification," *International Journal of Computational Linguistics Research*, vol. 5, no. 1, pp. 14–25, 2014.



- [14] N. Alias, N. Abd Rahman, Z. M. Nor, and M. N. Alias, "Searching algorithm of authentic chain of narrators' in shahih bukhari book," in *Proceedings of the International Conference on Applied Computing, Mathematical Sciences and Engineering (ACME 2016)*, 2016.
- [15] M. Mghari, O. Bouras, and A. El Hibaoui, "Sanadset 650k: Data on hadith narrators," *Data in Brief*, vol. 44, p. 108540, 2022. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S2352340922007478>
- [16] M. S. Al-Shaibani and I. Ahmad, "Dotless representation of arabic text: Analysis and modeling," 2023. [Online]. Available: <https://arxiv.org/abs/2312.16104>
- [17] M. Mghari, O. Bouras, and A. E. Hibaoui, "Narrator2vec: An efficient narrator representation in hadith literature using word embedding," *Arabian Journal for Science and Engineering*, vol. 49, no. 3, pp. 4479–4494, 2024. [Online]. Available: <https://doi.org/10.1007/s13369-023-08224-7>
- [18] L. C. Smit, J. Dikken, M. J. Schuurmans, N. J. de Wit, and N. Bleijenberg, "Value of social network analysis for developing and evaluating complex healthcare interventions: a scoping review," *BMJ Open*, vol. 10, no. 11, p. e039681, 2020.
- [19] A. Mehrpour, E. D. Widmer, and C. Staerklé, "Social network analysis in social psychological research (1990-2020): A scoping review," *British Journal of Social Psychology*, vol. 64, no. 1, p. e12833, 2025.
- [20] G. Zaefarian, S. Misra, M. Koval, and V. Iurkov, "Editorial: Social network analysis in marketing: A step-by-step guide for researchers," *Industrial Marketing Management*, vol. 107, pp. A11–A24, 2022.
- [21] E. A. L. Werner, "Typology of terrorist profiling using centrality metrics: Hinge figures, influential operatives and trusted assets," *Terrorism and Political Violence*, vol. 37, no. 5, pp. 573–588, 2025. [Online]. Available: <https://doi.org/10.1080/09546553.2024.2342866>
- [22] D. F. Iezzi, "Centrality measures for text clustering," *Communications in Statistics - Theory and Methods*, vol. 41, no. 16-17, pp. 3179–3197, 2012. [Online]. Available: <https://doi.org/10.1080/03610926.2011.633729>
- [23] R. Palak and S. V. Nguyen, "Centralization measures for social networks," *Cybernetics and Systems*, vol. 52, no. 5, pp. 398–418, 2021. [Online]. Available: <https://doi.org/10.1080/01969722.2020.1871228>
- [24] C. Peng, F. Xia, M. Naseriparsa, and F. Osborne, "Knowledge graphs: Opportunities and challenges," *Artificial Intelligence Review*, vol. 56, no. 11, pp. 13 071–13 102, 2023. [Online]. Available: <https://doi.org/10.1007/s10462-023-10465-9>
- [25] S. Mahmoud, O. Saif, E. Nabil, M. Abdeen, M. ElNainay, and M. Torki, "Ar-sanad 280k: A novel 280k artificial sanads dataset for hadith narrator disambiguation," *Information*, vol. 13, no. 2, p. 55, 2022. [Online]. Available: <https://www.mdpi.com/2078-2489/13/2/55>



- [26] K. M. Awad, M. ElNainay, M. Abdeen, M. Torki, O. Saif, and E. Nabil, "A secure blockchain framework for storing historical text: A case study of the holy hadith," *Computers*, vol. 11, no. 3, 2022. [Online]. Available: <https://www.mdpi.com/2073-431X/11/3/42>
- [27] S. Mahmoud, E. Nabil, O. Saif, and M. Torki, "Narrator identification by querying sanad graph and utilizing the narratorskg on ar-sanad 280k-v2 dataset," *Neural Computing and Applications*, vol. 36, no. 36, pp. 23 169–23 180, 2024. [Online]. Available: <https://doi.org/10.1007/s00521-024-10194-2>
- [28] M. Hendawi, M. Torki, A. Elmasry, and A. Khalafallah, "Automating sanad continuity verification in disconnected hadith using machine learning," in *2024 34th International Conference on Computer Theory and Applications (ICCTA)*, 2024, pp. 206–212.
- [29] A. M. Azmi, A. O. Al-Qabbany, and A. Hussain, "Computational and natural language processing based studies of hadith literature: a survey," *Artificial Intelligence Review*, vol. 52, no. 2, pp. 1369–1414, Aug. 2019. [Online]. Available: <https://doi.org/10.1007/s10462-019-09692-w>
- [30] S. Mahmoud, O. Saif, E. Nabil, M. Abdeen, M. ElNainay, and M. Torki, "Ar-sanad 280k: A novel 280k artificial sanads dataset for hadith narrator disambiguation," *Information*, vol. 13, no. 2, p. 55, 2022.
- [31] J. L. Esposito, *The Future of Islam*. Oxford, UK: Oxford University Press, 2010.
- [32] Farooqi, "Multi-isnadset mis for sahih muslim hadith with chain of narrators, based on multiple isnad," *Data in Brief*, vol. 54, p. 110439, 2024.
- [33] M. Huda, "Macam-macam hadis dari segi kualitasnya," *JUTEQ: Jurnal Teologi & Tafsir*, vol. 2, no. 3, pp. 645–660, March 2025.
- [34] N. Rahmatina, "Hadis ditinjau dari segi kuantitas (hadis mutawatir dan hadis ahad)," *Al-Manba': Jurnal Ilmiah Keislaman dan Kemasyarakatan*, vol. 8, no. 1, January 2023. [Online]. Available: <https://doi.org/10.69782/almanba.v8i1.12>
- [35] M. Y. Al-Fahl, *Atsar ikhtilaf al-asanid wa al-mutun fi ikhtilaf al-fuqaha'*. Beirut: Dar al-Kutub al-'Ilmiyyah, 2009.
- [36] J. Lukman, "Identifying the narrator of hadith in the criticism of sanad," *Al-Bukhari : Jurnal Ilmu Hadis*, 2020.
- [37] S. Khoshraftar and A. An, "A survey on graph representation learning methods," *ACM Transactions on Intelligent Systems and Technology*, vol. 15, no. 1, pp. 1–55, 2024.
- [38] D. Monk, "Introduction to graph theory, by robin j. wilson. pp viii, 168. £1.50. 1972 (oliver and boyd)," *The Mathematical Gazette*, vol. 57, no. 402, p. 348–348, 1973.
- [39] X. Hao, Z. Ji, X. Li, L. Yin, L. Liu, M. Sun, Q. Liu, and R. Yang, "Construction and application of a knowledge graph," *Remote Sensing*, vol. 13, no. 13, p. 2511, 2021.



- [40] W. Gołędzinowski and W. Błocki, “Social network analysis: From graph theory to applications,” *Social Communication*, vol. 24, no. 1, 2023.
- [41] M. Tsvetovat and A. Kouznetsov, *Social network analysis for startups: Finding connections on the social web*. O’Reilly Media, 2011.
- [42] C. Laghridat and M. Essalih, “A set of measures of centrality by level for social network analysis,” *Procedia Computer Science*, vol. 219, pp. 751–758, 2023.
- [43] J. Zhang and Y. Luo, “Degree centrality, betweenness centrality, and closeness centrality in social network,” 01 2017.
- [44] N. Mamatha, S. S. Sunitha, and M. D. Shivakumar, “Graph theory and its role in social network analysis,” *World Journal of Advanced Research and Reviews*, vol. 21, no. 2, pp. 2088–2093, 2024.
- [45] T. Kowalewski and B. Ruschoff, “Engagement and exhaustion in healthcare: a network approach,” *Career Development International*, 2019.
- [46] U. Brandes and C. Pich, “Centrality estimation in large networks,” *Int. J. Bifurc. Chaos*, vol. 17, pp. 2303–2318, 2007. [Online]. Available: <https://doi.org/10.1142/S0218127407018403>
- [47] R. Sinn and G. M. Ziegler, “Landau on chess tournaments and google’s pagerank,” 2022. [Online]. Available: <https://arxiv.org/abs/2210.17300>
- [48] N. Thaker and A. Shukla, “Python as multi paradigm programming language,” *International Journal of Computer Applications*, vol. 177, no. 1, pp. 38–42, 2020.
- [49] A. Jovanović, A. Uzelac, K. Kukić, and D. Teodorović, “The shortest-path and bee colony optimization algorithms for traffic control at single intersection with networkx application,” *Demonstratio Mathematica*, vol. 57, no. 1, p. 20230160, 2024.
- [50] A. Majumdar, “Elasticsearch as a nosql database for fast distributed financial service applications,” *Journal of Artificial Intelligence & Cloud Computing*, 2022.
- [51] A. Mehdi, M. K. Bali, S. I. Abbas, and M. Singh, “Unleashing the potential of grafana: A comprehensive study on real-time monitoring and visualization,” in *2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, 2023, pp. 1–8.
- [52] M. Bastian, S. Heymann, and M. Jacomy, “Gephi: An open source software for exploring and manipulating networks,” in *Proceedings of the International AAAI Conference on Web and Social Media*, vol. 3, no. 1, 2009.