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ANALISIS PENGARUH PARAMETER RETRIEVAL-AUGMENTED GENERATION PADA LARGE LANGUAGE MODEL UNTUK SISTEM DIAGNOSIS BANDING CEDERA OLAHRAGA LARI
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DAFTAR PUSTAKA

[1] Tempo.co, "Survei menunjukkan mayoritas masyarakat kini gemar berolahraga," Februari 2025, diakses pada 25 Mei 2026. [Online]. Available: https://www.tempo.co/gaya-hidup/survei-menunjukkan-mayoritas-masyarakat-kini-gemar-berolahraga-1201407

[2] I. Tanip and S. Adi Putra, "Understanding Indonesia's sports trends," Populix, Industry Report, Januari 2025, diakses pada 25 Mei 2026. [Online]. Available: https://info.populix.co/reports

[3] E. Zakia, "Peningkatan tren lari di Indonesia, bagaimana manfaatnya bagi ekonomi nasional?" GoodStats, Oktober 2025, diakses pada 25 Mei 2026. [Online]. Available: https://goodstats.id/article/peningkatan-tren-lari-di-indonesia-bagaimana-manfaatnya-bagi-ekonomi-nasional-6s7oI

[4] Strava, "Strava rilis edisi ke-12 laporan Year in Sport Trend, ungkap olahraga gantikan doomscrolling sebagai aktivitas generasi muda," Strava Press, Desember 2025, diakses pada 25 Mei 2026. [Online]. Available: https://press.strava.com/id/articles/strava-releases-12th-annual-year-in-sport-trend-report-2025

[5] M. E. F. Costa, J. B. Fonseca, A. I. S. d. Oliveira, K. D. d. A. Cabral, M. d. G. R. d. Araújo, and A. P. d. L. Ferreira, "Prevalence and factors associated with injuries in recreational runners: A cross-sectional study," *Revista Brasileira de Medicina do Esporte*, vol. 26, no. 3, pp. 215–219, 2020. [Online]. Available: https://doi.org/10.1590/1517-869220202603190923

[6] Y. Shen, W. Yao, Y. Huang, L. Ye, J. Liu, M. Liu, J. Ding, and Y. Zhang, "Mri analysis of and factors related to knee injuries in amateur marathon runners," *PLOS ONE*, vol. 19, no. 7, pp. 1–11, 07 2024. [Online]. Available: https://doi.org/10.1371/journal.pone.0306257

[7] C. E. Cook and S. Décary, "Higher order thinking about differential diagnosis," *Brazilian Journal of Physical Therapy*, vol. 24, no. 1, pp. 1–7, 2020. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S1413355518310669

[8] C. M. Cogan, C. B. Paquet, J. Y. Lee, K. E. Miller, M. D. Crowley, and J. L. Davis, "Differentiating the symptoms of posttraumatic stress disorder and bipolar disorders in adults: Utilizing a trauma-informed assessment approach," *Clinical Psychology & Psychotherapy*, vol. 28, no. 1, pp. 251–260, 2021. [Online]. Available: https://onlinelibrary.wiley.com/doi/abs/10.1002/cpp.2504

[9] M. N. Leite, C. S. Vallio, P. Marinelli, F. J. Jandre Reis, N. M. Filho, and L. Hespanhol, "Complaints and pain predominance in running-related injuries: A bayesian inference analyses," *Journal of Bodywork and Movement Therapies*, vol. 42, pp. 368–374, 2025. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S1360859224005874

[10] I. Fernández-López and D. Rojano-Ortega, "Lower limb biomechanical factors related to running injuries: A review and practical recommendations," *Strength and Conditioning Journal*, vol. 42, no. 1, pp. 24–38, February 2020.

UNIVERSITAS
GADJAH MADA
ANALISIS PENGARUH PARAMETER RETRIEVAL-AUGMENTED GENERATION PADA LARGE LANGUAGE MODEL UNTUK SISTEM
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[11] P. Chotcomwongse, P. Ruamviboonsuk, and A. Grzybowski, "Utilizing large language models in ophthalmology: The current landscape and challenges," *Ophthalmology and Therapy*, vol. 13, no. 10, pp. 2543–2558, 2024. [Online]. Available: https://doi.org/10.1007/s40123-024-01018-6

[12] M. Tatar, S. Farokhi, A. A. Foumani, E. Uzunlar, and O. M. Araz, "Application of gemini in public health amid the artificial intelligence era," *IEEE Engineering Management Review*, vol. 54, no. 1, pp. 21–27, 2026.

[13] M. P. Priola, "Addressing hallucinations with rag and nmiss in italian healthcare llm chatbots," *arXiv preprint arXiv:2412.04235*, 2024.

[14] Z. Hu, Z. Peng, Z. Bi, Q. Shen, Z. Liu, J. Lou, and X. Luo, "Advancing healthcare with large language models: Techniques and application," *IEEE/CAA Journal of Automatica Sinica*, vol. 12, no. 12, pp. 2371–2398, 2025.

[15] T. H. Kung, M. Cheatham, A. Medenilla, C. Sillos, L. De Leon, C. Elepaño, M. Madriaga, R. Aggabao, G. Diaz-Candido, J. Maningo, and V. Tseng, "Performance of chatgpt on usmle: Potential for ai-assisted medical education using large language models," *PLOS Digital Health*, vol. 2, no. 2, pp. 1–12, 02 2023. [Online]. Available: https://doi.org/10.1371/journal.pdig.0000198

[16] T. Hirosawa, Y. Harada, M. Yokose, T. Sakamoto, R. Kawamura, and T. Shimizu, "Diagnostic accuracy of differential-diagnosis lists generated by generative pretrained transformer 3 chatbot for clinical vignettes with common chief complaints: A pilot study," *International Journal of Environmental Research and Public Health*, vol. 20, no. 4, 2023. [Online]. Available: https://www.mdpi.com/1660-4601/20/4/3378

[17] D. McDuff, M. Schaekermann, T. Tu, A. Palepu, A. Wang, J. Garrison, K. Singhal, Y. Sharma, S. Azizi, K. Kulkarni, L. Hou, Y. Cheng, Y. Liu, S. S. Mahdavi, S. Prakash, A. Pathak, C. Semturs, S. Patel, D. R. Webster, E. Dominowska, J. Gottweis, J. Barral, K. Chou, G. S. Corrado, Y. Matias, J. Sunshine, A. Karthikesalingam, and V. Natarajan, "Towards accurate differential diagnosis with large language models," *Nature*, vol. 642, no. 8067, pp. 451–457, 2025. [Online]. Available: https://doi.org/10.1038/s41586-025-08869-4

[18] E. Schumacher, D. Naik, and A. Kannan, "Rare disease differential diagnosis with large language models at scale: From abdominal actinomycosis to wilson's disease," 2025. [Online]. Available: https://arxiv.org/abs/2502.15069

[19] G. Yao, W. Zhang, Y. Zhu, U. kei Wong, Y. Zhang, C. Yang, G. Shen, Z. Li, and H. Gao, "Comparing the accuracy of large language models and prompt engineering in diagnosing realworld cases," *International Journal of Medical Informatics*, vol. 203, p. 106026, 2025. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S1386505625002436

[20] S. Pinna, S. M. Massa, and D. Riboni, "Ai-driven differential diagnosis: Leveraging rag and llms in intelligent healthcare systems," in *2025 21st International Conference on Intelligent Environments (IE)*, 2025, pp. 1–8.

UNIVERSITAS
GADJAH MADA
ANALISIS PENGARUH PARAMETER RETRIEVAL-AUGMENTED GENERATION PADA LARGE LANGUAGE MODEL UNTUK SISTEM
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[21] M. Cremaschi, D. Ditolve, C. Curcio, A. Panzeri, A. Spoto, and A. Maurino, "Decoding the mind: A rag-llm on icd-11 for decision support in psychology," *Expert Systems with Applications*, vol. 279, p. 127191, 2025. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S0957417425008139

[22] J. Eskenazi, V. Krishnan, M. Konarzewski, D. Constantinescu, G. Lobaton, and S. D. Dodds, "Evaluating retrieval augmented generation and ChatGPT's accuracy on orthopaedic examination assessment questions," *Annals of Joint*, vol. 10, 2025. [Online]. Available: https://journals.lww.com/aoj/fulltext/2025/04000/evaluating_retrieval_augmented_generation_and.2.aspx

[23] Y. Harada, S. Katsukura, R. Kawamura, and T. Shimizu, "Effects of a differential diagnosis list of artificial intelligence on differential diagnoses by physicians: An exploratory analysis of data from a randomized controlled study," *International Journal of Environmental Research and Public Health*, vol. 18, no. 11, p. 5562, Mei 2021.

[24] D. Park and M. R. Carmont, *Mountain, Sky, and Endurance Running*. London: Springer London, 2013, pp. 273–301. [Online]. Available: https://doi.org/10.1007/978-1-4471-4363-5_13

[25] P. Vlahek, "Running and health," *Medicus*, vol. 28, no. 2, pp. 263–267, Oktober 2019, original language: Croatian.

[26] E. Kapri, M. Mehta, and K. Singh, "Biomechanics of running: An overview on gait cycle," *Int. J. Phys. Educ. Fit. Sports*, vol. 10, no. 3, pp. 1–9, 2021.

[27] X. Jiang, I. Bíró, J. Sárosi, Y. Fang, and Y. Gu, "Comparison of ground reaction forces as running speed increases between male and female runners," *Frontiers in Bioengineering and Biotechnology*, vol. Volume 12 - 2024, 2024. [Online]. Available: https://www.frontiersin.org/journals/bioengineering-and-biotechnology/articles/10.3389/fbioe.2024.1378284

[28] J. S. Gottschall and R. Kram, "Ground reaction forces during downhill and uphill running," *Journal of Biomechanics*, vol. 38, no. 3, pp. 445–452, Maret 2005.

[29] N. Kakouris, N. Yener, and D. T. Fong, "A systematic review of running-related musculoskeletal injuries in runners," *Journal of Sport and Health Science*, vol. 10, no. 5, pp. 513–522, 2021. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S2095254621000454

[30] S. Videbæk, A. M. Bueno, R. O. Nielsen, and S. Rasmussen, "Incidence of running-related injuries per 1000 h of running in different types of runners: A systematic review and meta-analysis," *Sports Medicine*, vol. 45, no. 7, pp. 1017–1026, Juli 2015.

[31] M. Engelhardt, I. Reuter, and G. Neumann, "Laufsport: Verletzungen und fehlbelastungsfolgen beim laufen," *Sports Orthopaedics and Traumatology Sport-Orthopädie - Sport-Traumatologie*, vol. 19, no. 2, pp. 73–77, 2003. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S0949328X14602490

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GADJAH MADA
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[32] R. G. Chang, L. Hewan-Lowe, E. Nehrbass, A. Bolds, J. Sukumar, and J. E. Herrera, *Overuse Injuries*. Cham: Springer International Publishing, 2022, pp. 211–241. [Online]. Available: https://doi.org/10.1007/978-3-030-80699-6_8

[33] F. S. Agustin, S. Nurwahida Puspitasari, S. Rizky Wulandari, M. Fis *et al.*, "Hubungan jarak tempuh lari terhadap kejadian cedera pada runners," Ph.D. dissertation, Universitas' Aisyiyah Yogyakarta, 2022.

[34] M. Nareza, "Patellofemoral pain syndrome," Alodokter, aug 2024. [Online]. Available: https://www.alodokter.com/patellofemoral-pain-syndrome#:~:text=Patellofemoral%20pain%20syndrome%20adalah%20nyeri,dalam%20waktu%20lama%2C%20atau%20jongkok.

[35] Redaksi Halodoc, "Olahraga terlalu keras, waspada medial tibial stress syndrome," Halodoc, oktober 2018. [Online]. Available: https://www.halodoc.com/artikel/olahraga-terlalu-keras-waspada-medial-tibial-stress-syndrome

[36] R. Murzen, "Plantar fasciitis," Alodokter, feb 2026. [Online]. Available: https://www.alodokter.com/plantar-fasciitis

[37] Redaksi Halodoc, "Iliotibial band syndrome: Penyebab, gejala, & cara mengatasi," https://www.halodoc.com/artikel/iliotibial-band-syndrome-penyebab-gejala-dan-cara-mengatasi-7, February 2026, ditinjau oleh dr. Fadhli Rizal Makarim. Diakses: 23 Juni 2026.

[38] Physiopedia, "Achilles tendinopathy — physiopedia,," 2026, [Online; accessed 23-June-2026]. [Online]. Available: https://www.physio-pedia.com/index.php?title=Achilles_Tendinopathy&oldid=376129

[39] Redaksi Halodoc, "Ankle sprain: Penyebab, gejala, dan cara mengatasi," Halodoc, 2026. [Online]. Available: https://www.halodoc.com/artikel/ankle-sprain-penyebab-gejala-dan-cara-mengatasi

[40] Physiopedia, "Proximal hamstring tendinopathy — physiopedia,," 2026, [Online; accessed 23-June-2026]. [Online]. Available: https://www.physio-pedia.com/index.php?title=Proximal_Hamstring_Tendinopathy&oldid=379269

[41] ——, "Patellar tendinopathy — physiopedia,," 2025, [Online; accessed 23-June-2026]. [Online]. Available: https://www.physio-pedia.com/index.php?title=Patellar_Tendinopathy&oldid=368496

[42] Centers for Disease Control and Prevention and National Center for Health Statistics, "ICD-10-CM: International classification of diseases, tenth revision, clinical modification," Centers for Disease Control and Prevention, Juni 2024, diakses pada 25 Mei 2026. [Online]. Available: https://www.cdc.gov/nchs/icd/icd-10-cm/index.html

[43] Kementerian Kesehatan Republik Indonesia, "ICD-10: Klasifikasi statistik internasional tentang penyakit dan masalah kesehatan revisi ke-10," SATUSEHAT Platform, 2024, diakses pada 25 Mei 2026. [Online]. Available: https://satusehat.kemkes.go.id/platform/docs/id/terminology/icd/icd-10/

UNIVERSITAS
GADJAH MADA
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[44] L. Monostori, "Artificial intelligence," in *CIRP Encyclopedia of Production Engineering*. Berlin, Heidelberg: Springer, 2019, p. 73. [Online]. Available: https://www.scopus.com/inward/record.uri?eid=2-s2.0-105012344828

[45] S. Chen, M. Feucht, A. Bhatt, and J. Farlow, "Artificial intelligence in head and neck surgical oncology: A state-of-the-art review," *Journal of Clinical Medicine*, vol. 15, p. 2767, 04 2026.

[46] S. M. Mian, M. S. Khan, M. Shawez, and A. Kaur, "Artificial intelligence (ai), machine learning (ml) & deep learning (dl): A comprehensive overview on techniques, applications and research directions," in *2024 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS)*, 2024, pp. 1404–1409.

[47] X. A. Yu, "Research status and trend of fault diagnosis based on deep learning," in *2020 3rd International Conference on Electron Device and Mechanical Engineering (ICEDME)*, 2020, pp. 230–232.

[48] D. Khurana, A. Koli, K. Khatter, and S. Singh, "Natural language processing: State of the art, current trends and challenges," *Multimedia Tools and Applications*, vol. 82, no. 3, pp. 3713–3744, 2023. [Online]. Available: https://doi.org/10.1007/s11042-022-13428-4

[49] H. Bian, "Unveiling the evolution and impact of pretrained language models in natural language processing," in *Proceedings of the 3rd International Conference on Computer, Artificial Intelligence and Control Engineering*, ser. CAICE '24. New York, NY, USA: Association for Computing Machinery, 2024, p. 588–592. [Online]. Available: https://doi.org/10.1145/3672758.3672854

[50] A. Vaswani, N. Shazeer, N. Parmar, J. Uszkoreit, L. Jones, A. N. Gomez, L. u. Kaiser, and I. Polosukhin, "Attention is all you need," in *Advances in Neural Information Processing Systems*, I. Guyon, U. V. Luxburg, S. Bengio, H. Wallach, R. Fergus, S. Vishwanathan, and R. Garnett, Eds., vol. 30. Curran Associates, Inc., 2017. [Online]. Available: https://proceedings.neurips.cc/paper_files/paper/2017/file/3f5ee243547dee91fbd053c1c4a845aa-Paper.pdf

[51] Microsoft Azure, "What are large language models (LLMs)?" Microsoft Azure Cloud Computing Dictionary, 2024, diakses pada 25 Mei 2026. [Online]. Available: https://azure.microsoft.com/en-us/resources/cloud-computing-dictionary/what-are-large-language-models-llms

[52] Z. Huang, X. Huang, A. Wu, X. Wang, and G. Cheng, "Transforming decoder-only models into encoder-only models with improved understanding capabilities," *Knowledge-Based Systems*, vol. 309, p. 112907, 2025. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S0950705124015417

[53] I. Ahmed, S. Islam, P. P. Datta, I. Kabir, M. N. U. R. Chowdhury, and A. Haque, "Qwen 2.5: A comprehensive review of the leading resource-efficient llm with potentioal to surpass all competitors," *TechRxiv*, vol. 2025, no. 0226, 2025. [Online]. Available: https://www.techrxiv.org/doi/abs/10.36227/techrxiv.174060306.65738406/v1

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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[54] J. Su, M. Ahmed, Y. Lu, S. Pan, W. Bo, and Y. Liu, "Roformer: Enhanced transformer with rotary position embedding," *Neurocomputing*, vol. 568, p. 127063, 2024. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S0925231223011864

[55] B. Peng, J. Quesnelle, H. Fan, and E. Shippole, "Yarn: Efficient context window extension of large language models," 2026. [Online]. Available: https://arxiv.org/abs/2309.00071

[56] J. Wang, E. Shi, S. Yu, Z. Wu, H. Hu, C. Ma, H. Dai, Q. Yang, Y. Kang, J. Wu, C. Yue, H. Zhang, Y. Liu, Y. Pan, Z. Liu, L. Sun, X. Li, B. Ge, X. Jiang, Y. Yuan, D. Shen, T. Liu, and S. Zhang, "Prompt engineering for healthcare: Methodologies and applications," *Meta-Radiology*, vol. 4, no. 1, p. 100190, 2026. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S295016282500058X

[57] R. P. Darmawan and S. A. Wibowo, "Prompt engineering for python code debugging with large language models: A comparative analysis of zero-shot, few-shot, and chain-of-thought approaches," in *2025 IEEE International Symposium on Future Telecommunication Technologies (SOFTT)*, 2025, pp. 391–395.

[58] A. K. Shahade and P. V. Deshmukh, "Enhancing natural language processing: A comprehensive review of retrieval augmented generation," in *2024 4th International Conference on Sustainable Expert Systems (ICSES)*, 2024, pp. 609–611.

[59] P. Lewis, E. Perez, A. Piktus, F. Petroni, V. Karpukhin, N. Goyal, H. Küttler, M. Lewis, W.-t. Yih, T. Rocktäschel, S. Riedel, and D. Kiela, "Retrieval-augmented generation for knowledge-intensive nlp tasks," in *Advances in Neural Information Processing Systems*, H. Larochelle, M. Ranzato, R. Hadsell, M. Balcan, and H. Lin, Eds., vol. 33. Curran Associates, Inc., 2020, pp. 9459–9474. [Online]. Available: https://proceedings.neurips.cc/paper_files/paper/2020/file/6b493230205f780e1bc26945df7481e5-Paper.pdf

[60] Y. Gao, Y. Xiong, X. Gao, K. Jia, J. Pan, Y. Bi, Y. Dai, J. Sun, M. Wang, and H. Wang, "Retrieval-augmented generation for large language models: A survey," 2024. [Online]. Available: https://arxiv.org/abs/2312.10997

[61] D. Goyal and A. Gautam, *Introduction to LangChain Framework*. John Wiley & Sons, Ltd, 2025, ch. 11, pp. 253–285. [Online]. Available: https://onlinelibrary.wiley.com/doi/abs/10.1002/9781394287499.ch11

[62] P. Selvaraj, "RAG and LangChain basics," DEV Community, Juni 2025, diakses pada 25 Mei 2026. [Online]. Available: https://dev.to/priyaselvaraj11/rag-and-langchain-basics-3n0h

[63] D. Sinha, "The ultimate guide to chunking strategies for RAG applications with Databricks," Databricks Community Technical Blog, April 2025, diakses pada 25 Mei 2026. [Online]. Available: https://community.databricks.com/t5/technical-blog/the-ultimate-guide-to-chunking-strategies-for-rag-applications/ba-p/113089

[64] C. Song and A. Raghunathan, "Information leakage in embedding models," in *Proceedings of the 2020 ACM SIGSAC Conference on Computer and Communications Security*, ser. CCS '20. New York, NY, USA: Association

UNIVERSITAS
GADJAH MADA
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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

for Computing Machinery, 2020, p. 377 390. [Online]. Available: https://doi.org/10.1145/3372297.3417270

[65] D. Dascalescu and Z. Hasan, "Vector embeddings explained," https://weaviate.io/blog/vector-embeddings-explained, January 2023, weaviate Blog. Last updated August 27, 2024. Accessed: June 2, 2026.

[66] X. Xie, H. Liu, W. Hou, and H. Huang, "A brief survey of vector databases," in *2023 9th International Conference on Big Data and Information Analytics (BigDIA)*, 2023, pp. 364–371.

[67] K. P. Kalyanathaya, D. Akila, and G. Suseendren, "A fuzzy approach to approximate string matching for text retrieval in nlp," *Journal of computational information systems*, vol. 15, no. 3, pp. 26–32, 2019.

[68] Evidently AI Team, "10 metrics to evaluate recommender and ranking systems," Evidently AI, Februari 2025, diakses pada 25 Mei 2026. [Online]. Available: https://www.evidentlyai.com/ranking-metrics/evaluating-recommender-systems

[69] S. Es, J. James, L. Espinosa Anke, and S. Schockaert, "RAGAs: Automated evaluation of retrieval augmented generation," in *Proceedings of the 18th Conference of the European Chapter of the Association for Computational Linguistics: System Demonstrations*, N. Aletras and O. De Clercq, Eds. St. Julians, Malta: Association for Computational Linguistics, Mar. 2024, pp. 150–158. [Online]. Available: https://aclanthology.org/2024.eacl-demo.16/

[70] R. Singh and N. S. Mangat, *Stratified Sampling*. Dordrecht: Springer Netherlands, 1996, pp. 102–144. [Online]. Available: https://doi.org/10.1007/978-94-017-1404-4_5

[71] L. Thomas, "Stratified sampling | definition, guide & examples," Scribbr, sep 2020, terakhir direvisi pada 22 Juni 2023. Diakses pada 22 Juni 2026. [Online]. Available: https://www.scribbr.com/methodology/stratified-sampling/

[72] T. Y. C. Tam, S. Sivarajkumar, S. Kapoor, A. V. Stolyar, K. Polanska, K. R. McCarthy, H. Osterhoudt, X. Wu, S. Visweswaran, S. Fu, P. Mathur, G. E. Cacciamani, C. Sun, Y. Peng, and Y. Wang, "A framework for human evaluation of large language models in healthcare derived from literature review," *npj Digital Medicine*, vol. 7, no. 1, p. 258, 2024. [Online]. Available: https://doi.org/10.1038/s41746-024-01258-7

[73] P. Brukner, K. Khan, B. Clarsen, J. Cook, A. Cools, K. Crossley, M. Hutchinson, P. McCrory, and R. Bahr, *Brukner & Khan's Clinical Sports Medicine: Injuries, Volume 1*, 5th ed. Sydney, Australia: McGraw-Hill Education, 2017.

[74] R. B. C. Loh and P. W. Kong, "Discriminant efficacy of video-based gait analysis in running-related injuries," *Journal of Medical and Biological Engineering*, pp. 1–9, 2026.

[75] M. Orbach, O. Eytan, B. Sznajder, A. Gera, O. Boni, Y. Kantor, G. Bloch, O. Levy, H. Abraham, N. Barzilay, E. Shnarch, M. E. Factor, S. Ofek-Koifman, P. Ta-Shma, and A. Toledo, "An analysis of hyper-parameter optimization methods for retrieval augmented generation," 2025. [Online]. Available: https://arxiv.org/abs/2505.03452

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ANALISIS PENGARUH PARAMETER RETRIEVAL-AUGMENTED GENERATION PADA LARGE LANGUAGE MODEL UNTUK SISTEM
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[76] A. Kang, J. Y. Chen, Z. Lee-Youngzie, and S. Fu, "Synthetic data generation with llm for improved depression prediction," 2024. [Online]. Available: https://arxiv.org/abs/2411.17672

[77] X. Xia, W. Du, Y. Cheng, and Y. Wei, "Citrus knowledge extraction model based on qwen2. 5," in *Proceedings of the 2025 2nd International Conference on Modeling, Natural Language Processing and Machine Learning*, 2025, pp. 332–339.

[78] D. Ivins, "Acute ankle sprain: an update," *American family physician*, vol. 74, no. 10, pp. 1714–1720, 2006.

[79] R. T. Cheung, G. Y. Ng, and B. F. Chen, "Association of footwear with patello-femoral pain syndrome in runners," *Sports Medicine*, vol. 36, no. 3, pp. 199–205, 2006.

[80] M. Fredericson and C. Wolf, "Iliotibial band syndrome in runners: innovations in treatment," *Sports medicine*, vol. 35, no. 5, pp. 451–459, 2005.

[81] M. H. Moen, J. L. Tol, A. Weir, M. Steunebrink, and T. C. De Winter, "Medial tibial stress syndrome: a critical review," *Sports medicine*, vol. 39, no. 7, pp. 523–546, 2009.

[82] K. H. Peers and R. J. Lysens, "Patellar tendinopathy in athletes: current diagnostic and therapeutic recommendations," *Sports medicine*, vol. 35, no. 1, pp. 71–87, 2005.

[83] F. Petraglia, I. Ramazzina, and C. Costantino, "Plantar fasciitis in athletes: diagnostic and treatment strategies. a systematic review," *Muscles, ligaments and tendons journal*, vol. 7, no. 1, p. 107, 2017.

[84] T. S. Goom, P. Malliaras, M. P. Reiman, and C. R. Purdam, "Proximal hamstring tendinopathy: clinical aspects of assessment and management," *journal of orthopaedic & sports physical therapy*, vol. 46, no. 6, pp. 483–493, 2016.

[85] D. A. Opar, M. D. Williams, and A. J. Shield, "Hamstring strain injuries," *Sports medicine*, vol. 42, no. 3, pp. 209–226, 2012.

[86] W. Matthews, R. Ellis, J. Furness, and W. A. Hing, "The clinical diagnosis of achilles tendinopathy: a scoping review," *PeerJ*, vol. 9, p. e12166, 2021.

[87] T. K. Koo and M. Y. Li, "A guideline of selecting and reporting intraclass correlation coefficients for reliability research," *Journal of chiropractic medicine*, vol. 15, no. 2, pp. 155–163, 2016.