

DAFTAR PUSTAKA

- Ahmad, H., Treude, C., Wagner, M., & Szabo, C. (2025). Towards resource-efficient reactive and proactive auto-scaling for microservice architectures. *Journal of Systems and Software*, 225, 112390. <https://doi.org/10.1016/j.jss.2025.112390>
- Amareen, S. (2024). *GraphQL Adoption and Challenges: Community-Driven Insights from StackOverflow Discussions*. <https://doi.org/10.1145/nnnnnnnn.nnnnnnnn>
- Ambasht, A. (2023). API Integration using GraphQL. *International Journal of Computer Trends and Technology*, 71(8), 28–33. <https://doi.org/10.14445/22312803/ijctt-v71i8p104>
- Blinowski, G., Ojdowska, A., & Przybylek, A. (2022). Monolithic vs. Microservice Architecture: A Performance and Scalability Evaluation. *IEEE Access*, 10, 20357–20374. <https://doi.org/10.1109/ACCESS.2022.3152803>
- Brito, G., & Valente, M. T. (2020). REST vs GraphQL: A controlled experiment. *Proceedings - IEEE 17th International Conference on Software Architecture, ICSA 2020, Dec*, 81–91. <https://doi.org/10.1109/ICSA47634.2020.00016>
- Chandra, S., & Farisi, A. (2025). Comparative Analysis of RESTful , GraphQL , and gRPC APIs : Perfomance Insight from Load and Stress Testing. *Jurnal SISFOKOM (Sistem Informasi dan Komputer)*, 14, 81–85.
- Chen, L. (2018). Microservices: Architecting for Continuous Delivery and DevOps. *Proceedings - 2018 IEEE 15th International Conference on Software Architecture, ICSA 2018*, 39–46. <https://doi.org/10.1109/ICSA.2018.00013>
- Cleveland, S. B., Jamthe, A., Padhy, S., Stubbs, J., Packard, M., Looney, J., Terry, S., Cardone, R., Dahan, M., & Jacobs, G. A. (2020). Tapis API Development with Python: Best Practices in Scientific REST API Implementation: Experience implementing a distributed Stream API. *ACM International Conference Proceeding Series*, 181–187. <https://doi.org/10.1145/3311790.3396647>
- Di Francesco, P. (2017). Architecting microservices. *Proceedings - 2017 IEEE International Conference on Software Architecture Workshops, ICSAW 2017: Side Track Proceedings*, 224–229. <https://doi.org/10.1109/ICSAW.2017.65>
- Fielding, R. T. (2000). *Architectural Styles and the Design of Network-based Software Architectures*. 1645, 1–76.
- Goriparthi, S. (2024). *STREAMLINING API DEVELOPMENT: A COMPARATIVE ANALYSIS OF GRAPHQL AND*. December.
- Gos, K., & Zabierowski, W. (2020). The Comparison of Microservice and Monolithic Architecture. *International Conference on Perspective*

Technologies and Methods in MEMS Design, April, 150–153.
<https://doi.org/10.1109/MEMSTECH49584.2020.9109514>

- Guha, M. S., & Shreyasi Majumder, M. (2020). A COMPARATIVE STUDY BETWEEN GRAPH-QL& RESTFUL SERVICES IN API MANAGEMENT OF STATELESS ARCHITECTURES. *International Journal on Web Service Computing (IJWSC)*, 11(2).
<https://doi.org/10.5121/ijwsc.2020.11201>
- Indrasiri, K., & Siriwardena, P. (2018). Microservices for the Enterprise. Dalam *Microservices for the Enterprise*. <https://doi.org/10.1007/978-1-4842-3858-5>
- Kamiński, L., Kozłowski, M., Sporysz, D., Wolska, K., Zaniewski, P., & Roszczyk, R. (2022). Comparative review of selected Internet communication protocols. *Foundations of Computing and Decision Sciences*, 48(1), 39–56. <https://doi.org/10.2478/fcds-2023-0003>
- Kaul, D. (2020). Dynamic Adaptive API Security Framework Using AI-Powered Blockchain Consensus for Microservices. *International Journal of Scientific Research and Management (IJSRM)*, 8(04).
<https://doi.org/10.18535/IJSRM/V08I4.EC03>
- Kazanavičius, J., & Mažeika, D. (2023a). EVALUATION OF MICROSERVICE COMMUNICATION WHILE DECOMPOSING MONOLITHS. *Computing and Informatics*, 42(1), 1–36.
https://doi.org/10.31577/cai_2023_1_1
- Kazanavičius, J., & Mažeika, D. (2023b). The Evaluation of Microservice Communication While Decomposing Monoliths. *Computing and Informatics*, 42(1), 1-36–1–36. https://doi.org/10.31577/CAI_2023_1_1
- Lawi, A., Panggabean, B. L. E., & Yoshida, T. (2021). Evaluating graphql and rest api services performance in a massive and intensive accessible information system. *Computers*, 10(11).
<https://doi.org/10.3390/computers10110138>
- Lercher, A. (2024). Managing API Evolution in Microservice Architecture. *Proceedings - International Conference on Software Engineering*, 195–197.
<https://doi.org/10.1145/3639478.3639800>
- Lercher, A., Glock, J., Macho, C., & Pinzger, M. (2024). Microservice API Evolution in Practice: A Study on Strategies and Challenges. *Journal of Systems and Software*, 215(August 2023), 112110.
<https://doi.org/10.1016/j.jss.2024.112110>
- Leu, B., Volken, J., Kropp, M., Dogru, N., Anslow, C., & Biddle, R. (2024). Reducing Workload in Using AI-based API REST Test Generation. *Proceedings - 2024 IEEE/ACM International Conference on Automation of Software Test, AST 2024*, 147–148.
<https://doi.org/10.1145/3644032.3644449>

- Margański, P., & Pańczyk, B. (2021). REST and GraphQL comparative analysis. *Journal of Computer Sciences Institute*, 19, 89–94. <https://doi.org/10.35784/JCSI.2473>
- Marii, B., & Zholubak, I. (2022). Features of Development and Analysis of REST Systems. *Advances in Cyber-Physical Systems*, 7(2), 121–129. <https://doi.org/10.23939/ACPS2022.02.121>
- Matcha, S., & Solanki, S. (2025). *RESTful API Design and Implementation : Best Practices for Building Scalable and Maintainable Web Services RESTful API Design and Implementation : Best Practices for Building Scalable and Maintainable Web Services*. February.
- Mikkelsen, A., Grønli, T. M., Tamburri, D. A., & Kazman, R. (2020). Architectural principles for autonomous microservices. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2020-Janua, 6569–6578. <https://doi.org/10.24251/hicss.2020.804>
- Mikuła, M., & Dzieńkowski, M. (2020). Comparison of REST and GraphQL web technology performance. *Journal of Computer Sciences Institute*, 16(August), 309–316. <https://doi.org/10.35784/jcsi.2077>
- Muzaki, R. N., & Salam, A. (2024). REDUCING UNDER-FETCHING AND OVER-FETCHING IN REST API WITH GRAPHQL FOR WEB-BASED SOFTWARE DEVELOPMENT. *Jurnal Teknik Informatika (Jutif)*, 5(2), 447–453. <https://doi.org/10.52436/1.JUTIF.2024.5.2.1725>
- Myllynen, T., Kamau, E., Mustapha, S. D., Babatunde, G. O., & Adeleye, A. (2023). *Developing a Conceptual Model for Cross-Domain Microservices Using Event-Driven and Domain-Driven Design Received : 11-12-2022 Accepted : 04-01-2023 Page No : 635-638. 635–648*.
- Neumann, A., Laranjeiro, N., & Bernardino, J. (2021). An Analysis of Public REST Web Service APIs. *IEEE Transactions on Services Computing*, 14(4), 957–970. <https://doi.org/10.1109/TSC.2018.2847344>
- Niswar, M., Safruddin, R. A., Bustamin, A., & Aswad, I. (2024). Performance evaluation of microservices communication with REST, GraphQL, and gRPC. *International Journal of Electronics and Telecommunications*, 70(2), 429–436. <https://doi.org/10.24425/ijet.2024.149562>
- Owen, A. (2025). *Microservices Architecture and API Management : A Comprehensive Study of Integration , Scalability , and Best Practices*. January.
- Papadhopulli, I., & Paci, H. (2024). GraphQL: A Comprehensive Analysis of Its Advantages, Challenges, and Best Practices in Modern API Development. *Technology, Engineering & Mathematics (EPSTEM)*, 32. www.isres.org
- Quiña-Mera, A., Fernandez, P., García, J. M., & Ruiz-Cortés, A. (2023a). GraphQL: A Systematic Mapping Study. *ACM Computing Surveys*, 55(10). <https://doi.org/10.1145/3561818>

- Quiña-Mera, A., Fernandez, P., García, M., & Ruiz-Cortés, A. (2023b). *GraphQL: A Systematic Mapping Study*. <https://doi.org/10.1145/3561818>
- Quiña-Mera, A., Guitarra de la Cruz, Z. M., & Guevara-Vega, C. (2025). Efficiency study of GraphQL and REST Microservices in Docker containers: A computational experiment. *Data and Metadata*, 4. <https://doi.org/10.56294/DM2025199>
- Ren, Z., Wang, W., Wu, G., Gao, C., Chen, W., Wei, J., & Huang, T. (2018). Migrating web applications from monolithic structure to microservices architecture. *ACM International Conference Proceeding Series*, 10. <https://doi.org/10.1145/3275219.3275230>
- Seth, A., Kumar, V., Kulshrestha, V., & Vij, A. (2024). Comparative Analysis of Web APIs: RESTful and GraphQL. *Lecture Notes in Electrical Engineering*, 1232, 159–169. https://doi.org/10.1007/978-981-97-5231-7_14
- Shafabakhsh, B. (2020). *Research on Interprocess Communication in Microservices Architecture*. <https://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-277940>
- Śliwa, M., & Pańczyk, B. (2021). Performance comparison of programming interfaces on the example of REST API, GraphQL and gRPC. *Journal of Computer Sciences Institute*, 21, 356–361. <https://doi.org/10.35784/JCSI.2744>
- Surianarayanan, C., Ganapathy, G., & Raj, P. (2019). Essentials of Microservices Architecture : Paradigms, Applications, and Techniques. *Essentials of Microservices Architecture*. <https://doi.org/10.1201/9780429329920>
- Tapia, F., Mora, M. ángel, Fuertes, W., Aules, H., Flores, E., & Toulkeridis, T. (2020). From Monolithic Systems to Microservices: A Comparative Study of Performance. *Applied Sciences 2020, Vol. 10, Page 5797*, 10(17), 5797. <https://doi.org/10.3390/APP10175797>
- Thallapally, N. (2024). Enhancing Data Query Flexibility with GraphQL: Implementation and Best Practices. *Journal of Computer Science and Technology Studies*, 6(2), 176–182. <https://doi.org/10.32996/JCSTS.2024.6.2.20>
- Vesić, M., & Kojić, N. (2020). COMPARATIVE ANALYSIS OF WEB APPLICATION PERFORMANCE IN CASE OF USING REST VERSUS GRAPHQL. *Udruženje ekonomista i menadžera Balkana*. <https://doi.org/10.31410/ITEMA.2020.17>
- Vohra, N., & Kerthyayana Manuaba, I. B. (2022). Implementation of REST API vs GraphQL in Microservice Architecture. *Proceedings of 2022 International Conference on Information Management and Technology, ICIMTech 2022*, 45–50. <https://doi.org/10.1109/ICIMTECH55957.2022.9915098>
- Wohlin, C., Runeson, P., Höst, M., Ohlsson, M. C., Regnell, B., & Wesslén, A. (2024). Experimentation in software engineering. Dalam *Experimentation in*

Software Engineering (Vol. 9783642290). <https://doi.org/10.1007/978-3-642-29044-2>