

DAFTAR PUSTAKA

- Arm, L. (2023a). What is a Central Processing Unit? – Arm®. <https://www.arm.com/glossary/cpu>.
- Arm, L. (2023b). What is a Graphics Processing Unit (GPU)? <https://www.arm.com/glossary/gpus>.
- Bezanson, J., Karpinski, S., Shah, V., and Edelman, A. (2023). Julia Micro-Benchmarks. <https://julialang.org/benchmarks/>.
- Bui, V., Pham, T., Nguyen, H., Tran Gia, H. N., and Mohd, T. K. (2021). Heterogeneous Computing and The Real-World Applications. In *2021 IEEE 12th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UE-MCON)*, pages 0747–0751.
- Businesswire (2023). The History of the GPU: From Inception to AI. <https://www.businesswire.com/news/home/20230216005383/en/The-History-of-the-GPU-From-Inception-to-AI>.
- Ceccon, F., Thukral, L., and Vergel Eleuterio, P. (2016). Momentum Strategies: Comparison of Programming Language Performance. *The Journal of Trading*, 11(2):49–53.
- Choi, Y.-H., Hong, M., and Choi, Y.-J. (2018). Parallel cloth simulation with GPGPU. *Multimedia Tools and Applications*, 77(22):30105–30120.
- D'Alessandris, P. (2024). *Spiral Modern Physics*. Monroe Community College.
- Dally, W. J., Keckler, S. W., and Kirk, D. B. (2021). Evolution of the Graphics Processing Unit (GPU). *IEEE Micro*, 41(6):42–51.
- Dokumentasi Julia (2024). Julia Documentation · The Julia Language. <https://docs.julialang.org/en/v1/>.
- Evanson, N. (2021). Explainer: What is an API? <https://www.techspot.com/article/2237-what-is-api/>.
- Gigabyte (2023a). HPC (High Performance Computing) - GIGABYTE Global. <https://www.gigabyte.com/Glossary/hpc>.
- Gigabyte (2023b). What is GPGPU? Why do you need it? - GIGABYTE Global. <https://www.gigabyte.com/Glossary/gpgpu>.
- Gmys, J., Carneiro, T., Melab, N., Talbi, E.-G., and Tuyttens, D. (2020). A comparative study of high-productivity high-performance programming languages for parallel metaheuristics. *Swarm and Evolutionary Computation*, 57:100720.



- Griffiths, D. J. and Schroeter, D. F. (2019). *Introduction to Quantum Mechanics, 3rd Edition*. Cambridge India.
- Hagoort, N. (2023). Exploring the GPU Architecture | VMware. <https://core.vmware.com/resource/exploring-gpu-architecture>.
- Helen (2020). GPU Architecture: A Structure for Data Parallel Throughput - MiniTool Partition Wizard. <https://www.partitionwizard.com/partitionmagic/gpu-architecture.html>.
- Hunold, S. and Steiner, S. (2020). Benchmarking Julia's Communication Performance: Is Julia HPC ready or Full HPC? In *2020 IEEE/ACM Performance Modeling, Benchmarking and Simulation of High Performance Computer Systems (PMBS)*, pages 20–25.
- Intel (2023). CPU vs. GPU: What's the Difference? <https://www.intel.com/content/www/us/en/products/docs/processors/cpu-vs-gpu.html>.
- Ismi, T. (2021). Penting untuk Data Science, yuk, Kenalan dengan Bahasa Pemrograman Julia.
- Jeff Bezanson, Stefan Karpinski, Viral Shah, and Alan Edelman (2024). The Julia Programming Language. <https://julialang.org/>.
- Khairy, M., Wassal, A. G., and Zahran, M. (2019). A survey of architectural approaches for improving GPGPU performance, programmability and heterogeneity. *Journal of Parallel and Distributed Computing*, 127:65–88.
- Kukunas, J. (2015). Chapter 2 - Intel® Pentium® Processors. In *Power and Performance*, pages 31–41. Morgan Kaufmann, Boston.
- Kulyabov, D. S. and Korol'kova, A. V. (2021). Computer Algebra in JULIA. *Programming and Computer Software*, 47(2):133–138.
- Learning, V. (2023). Understanding the architecture of a GPU.
- Matthes, E. (2016). *Python Crash Course: A Hands-on, Project-Based Introduction to Programming*. No Starch Press, San Francisco.
- Moura, R. A. R., Schroeder, M. A. O., Silva, S. J. S., Nepomuceno, E. G., Vieira, P. H. N., and Lima, A. C. S. (2019). The Usage of Julia Programming in Grounding Grids Simulations : An alternative to MATLAB and Python. *2019 International Symposium on Lightning Protection (XV SIPDA)*, pages 1–4.
- Pharr, M. and Fernando, R. (2005). *GPU Gems 2: Programming Techniques for High-Performance Graphics and General-Purpose Computation (Gpu Gems)*. Addison-Wesley Professional.



- Ravasi, M. (2021). Leveraging GPUs for matrix-free optimization with PyLops. *Fifth EAGE Workshop on High Performance Computing for Upstream*, pages 1–5.
- Strang, G. (2023). *Introduction to Linear Algebra*. Wellesley-Cambridge press, Wellesley, Mass, 6th ed edition.
- Thakur, A. (2022). Text Summarizer Using Julia. *International Journal for Research in Applied Science and Engineering Technology*, 10(1):1371–1375.
- Thomas Scofield (2018). Eigenvalues and Eigenvectors.
- Tjandra, Y. and Lawalat, S. (2022). Parallel Numerical Computation: A Comparative Study on Cpu-gpu Performance in Pi Digits Computation. *Jurnal Pilar Nusa Mandiri*, 18(2):93–100.
- Tomasi, M. and Giordano, M. (2018). Towards new solutions for scientific computing: The case of Julia. *ArXiv*.
- Wikipedia (2023a). General-purpose computing on graphics processing units. *Wikipedia*.
- Wikipedia (2023b). Graphics processing unit. *Wikipedia*.
- Xiao, L., Mei, G., Xi, N., and Piccialli, F. (2022). Julia Language in Computational Mechanics: A New Competitor. *Archives of Computational Methods in Engineering*, 29(3):1713–1726.
- Zappa Nardelli, F., Belyakova, J., Pelenitsyn, A., Chung, B., Bezanson, J., and Vitek, J. (2018). Julia subtyping: A rational reconstruction. *Proceedings of the ACM on Programming Languages*, 2(OOPSLA):1–27.