

DAFTAR PUSTAKA

- Appeltant, L., Soriano, M. C., Van Der Sande, G., Danckaert, J., Massar, S., Dambre, J., Schrauwen, B., Mirasso, C. R., & Fischer, I. (2011). Information processing using a single dynamical node as complex system. *Nature Communications*, 2(1). <https://doi.org/10.1038/ncomms1476>
- Berezowski, M. (2024). Method for determining the Lyapunov exponent of a continuous model using the monodrome matrix. *Chaos, Solitons & Fractals*, 186, 115334. <https://doi.org/10.1016/j.chaos.2024.115334>
- Boeing, G. (2016). Visual analysis of nonlinear dynamical systems: Chaos, fractals, self-similarity and the limits of prediction. *Systems*, 4(4). <https://doi.org/10.3390/systems4040037>
- Brownlee, J. (2017). *Long Short-term Memory Networks with Python: Develop Sequence Prediction Models with Deep Learning*. Jason Brownlee. <https://books.google.co.id/books?id=ONpdsWEACAAJ>
- Cox, S. M., & Matthews, P. C. (2002). Exponential time differencing for stiff systems. *Journal of Computational Physics*, 176(2), 430–455. <https://doi.org/10.1006/jcph.2002.6995>
- Cox, S. M., & Matthews, P. C. (2007). Pattern formation in the damped Nikolaevskiy equation. *Physical Review E - Statistical, Nonlinear, and Soft Matter Physics*, 76(5). <https://doi.org/10.1103/PhysRevE.76.056202>
- Cvitanović, P., Davidchack, R. L., & Siminos, E. (2010). On the state space geometry of the Kuramoto-Sivashinsky flow in a periodic domain. *SIAM Journal on Applied Dynamical Systems*, 9(1), 1–33. <https://doi.org/10.1137/070705623>
- De La Hoz, F., & Vaddillo, F. (2009). *Exponential time differencing methods for nonlinear PDEs*.
- de la Hoz, F., & Vaddillo, F. (2016). Numerical simulations of time-dependent partial differential equations. *Journal of Computational and Applied Mathematics*, 295, 175–184. <https://doi.org/10.1016/j.cam.2014.10.006>

- Gauthier, D. J., Bollt, E., Griffith, A., & Barbosa, W. A. S. (2021). Next generation reservoir computing. *Nature Communications*, 12(1). <https://doi.org/10.1038/s41467-021-25801-2>
- Ghosh, A., Sufian, A., Sultana, F., Chakrabarti, A., & De, D. (2020). *Fundamental Concepts of Convolutional Neural Network* (pp. 519–567). https://doi.org/10.1007/978-3-030-32644-9_36
- Hastings, A., Hom, C. L., Ellner, S., & Turchin, P. (1993). CHAOS IN ECOLOGY: Is Mother Nature a Strange Attractor?* Further ANNUAL REVIEWS. In *Annu. Rev. Ecol. Syst.* 1993 (Vol. 24). www.annualreviews.org
- Hu, Z., Li, Y., & Yang, Z. (2018). Improving Convolutional Neural Network Using Pseudo Derivative ReLU. *2018 5th International Conference on Systems and Informatics (ICSAI)*, 283–287. <https://doi.org/10.1109/ICSAI.2018.8599372>
- Janaki, T. M., & Rangarajan, G. (2003). *Lyapunov Exponents for Continuous-Time Dynamical Systems*.
- Jin, L., Liu, Z., & Li, L. (2023). Prediction and identification of nonlinear dynamical systems using machine learning approaches. *Journal of Industrial Information Integration*, 35. <https://doi.org/10.1016/j.jii.2023.100503>
- Kiranyaz, S., Ince, T., Abdeljaber, O., Avci, O., & Gabbouj, M. (2019). 1-D Convolutional Neural Networks for Signal Processing Applications. *ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 8360–8364. <https://doi.org/10.1109/ICASSP.2019.8682194>
- Kumar, H., & Hasija, Y. (2021). *Machine Learning in Medical Image Processing* (Vol. 1, pp. 377–383). https://doi.org/10.1007/978-981-15-7078-0_35
- Lee, W. S., & Flach, S. (2020). Deep learning of chaos classification. *Machine Learning: Science and Technology*, 1(4). <https://doi.org/10.1088/2632-2153/abb6d3>
- Lepik, Ü., & Hein, H. (2014). *Haar Wavelets*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-04295-4>

- Li, G., Duan, J., Li, D., Wang, C., & Deng, S. (2024). Transient dynamics in a quasiperiodically forced nonsmooth dynamical system. *Nonlinear Dynamics*, 112(8), 6205–6214. <https://doi.org/10.1007/s11071-024-09370-9>
- Mattheij, R. M. M., Rienstra, S. W., & Boonkkamp, J. H. M. ten T. (2005). *Partial Differential Equations*. Society for Industrial and Applied Mathematics. <https://doi.org/10.1137/1.9780898718270>
- Moon, F. C. . (1992). *Chaotic and fractal dynamics : an introduction for applied scientists and engineers*. Wiley.
- Müller, A. C., & Guido, S. (2017). *Introduction to machine learning with Python : a guide for data scientists* (First edition). O'Reilly Media, Inc.
- Opstall, M. Van. (1998). QUANTIFYING CHAOS IN DYNAMICAL SYSTEMS WITH LYAPUNOV EXPONENTS. In *Furman University Electronic Journal of Undergraduate Mathematics* (Vol. 4).
- Ott, E. (2002). *Chaos in Dynamical Systems* (2nd ed.). Cambridge University Press.
- Peng, Y., & Nagata, M. H. (2020). An empirical overview of nonlinearity and overfitting in machine learning using COVID-19 data. *Chaos, Solitons and Fractals*, 139. <https://doi.org/10.1016/j.chaos.2020.110055>
- Rao, L., Zhang, B., & Zhao, J. (2016). Hardware Implementation of Reconfigurable 1D Convolution. *Journal of Signal Processing Systems*, 82(1), 1–16. <https://doi.org/10.1007/s11265-015-0969-5>
- Rosenstein', M. T., Collins, J. J., De Luca, C. J., & Rapp, P. E. (1993). A practical method for calculating largest Lyapunov exponents from small data sets. In *Physica D* (Vol. 65).
- Sarker, I. H. (2021). Machine Learning: Algorithms, Real-World Applications and Research Directions. In *SN Computer Science* (Vol. 2, Issue 3). Springer. <https://doi.org/10.1007/s42979-021-00592-x>
- Simbawa, E., Matthews, P. C., & Cox, S. M. (2010). *The Nikolaevskiy equation with dispersion*. <https://doi.org/10.1103/PhysRevE.81.036220>
- Skokos, C. (2008). *The Lyapunov Characteristic Exponents and their computation*. https://doi.org/10.1007/978-3-642-04458-8_2

- Smith, L. (2007). *Chaos: A Very Short Introduction*. Oxford University Press.
<https://doi.org/10.1093/actrade/9780192853783.001.0001>
- Sreelatha, K. S. (2021). Dynamics of Nonlinear Systems: Integrable and Chaotic Solutions. In V. Sreelatha K. S. and Jacob (Ed.), *Modern Perspectives in Theoretical Physics: 80th Birthday Festschrift in Honor of K. Babu Joseph* (pp. 165–182). Springer Singapore. https://doi.org/10.1007/978-981-15-9313-0_12
- Strogatz, S. (2015). *NONLINEAR DYNAMICS AND CHAOS*. CRC Press.
- Taye, M. M. (2023). Understanding of Machine Learning with Deep Learning: Architectures, Workflow, Applications and Future Directions. In *Computers* (Vol. 12, Issue 5). MDPI. <https://doi.org/10.3390/computers12050091>
- Tribelsky, M. I., & Velarde, M. G. (1996). Short-wavelength instability in systems with slow long-wavelength dynamics. *Physical Review E*, 54(5), 4973–4981. <https://doi.org/10.1103/PhysRevE.54.4973>
- Van Houdt, G., Mosquera, C., & Nápoles, G. (2020). A review on the long short-term memory model. *Artificial Intelligence Review*, 53(8), 5929–5955. <https://doi.org/10.1007/s10462-020-09838-1>
- Yadav, H., & Thakkar, A. (2024). NOA-LSTM: An efficient LSTM cell architecture for time series forecasting. *Expert Systems with Applications*, 238, 122333. <https://doi.org/10.1016/j.eswa.2023.122333>
- Yao, X., & Liu, Y. (2014). Machine learning. In *Search Methodologies: Introductory Tutorials in Optimization and Decision Support Techniques, Second Edition* (pp. 477–518). Springer US. https://doi.org/10.1007/978-1-4614-6940-7_17
- Ye, J. C. (2022). Convolutional Neural Networks. In *Mathematics in Industry* (Vol. 37, pp. 113–134). Springer Medizin. https://doi.org/10.1007/978-981-16-6046-7_7