

DAFTAR PUSTAKA

- Asaad, R. R., & Ali, R. I. (2019). Back Propagation Neural Network(BPNN) and Sigmoid Activation Function in Multi-Layer Networks. *Academic Journal of Nawroz University*, 8(4), 216–221. <https://doi.org/10.25007/ajnu.v8n4a464>
- BARDAN, V. (1987). TRACE INTERPOLATION IN SEISMIC DATA PROCESSING *. *Geophysical Prospecting*, 35(4), 343–358. <https://doi.org/10.1111/j.1365-2478.1987.tb00822.x>
- Berhich, A., Belouadha, F.-Z., & Kabbaj, M. I. (2020). LSTM-based Models for Earthquake Prediction. *Proceedings of the 3rd International Conference on Networking, Information Systems & Security*, 1–7. <https://doi.org/10.1145/3386723.3387865>
- Beyreuther, M., Barsch, R., Krischer, L., Megies, T., Behr, Y., & Wassermann, J. (2010). ObsPy: A Python Toolbox for Seismology. *Seismological Research Letters*, 81(3), 530–533. <https://doi.org/10.1785/gssrl.81.3.530>
- Bilal Khan, W. (2018). Differences Between Standard Deviation and Robust NIQR Method During Z-Score Evaluation. *2018 15th International Conference on ElectroMagnetic Interference & Compatibility (INCEMIC)*, 1–4. <https://doi.org/10.1109/INCEMIC.2018.8704599>
- Blumberg, S. B., Raví, D., Xu, M.-C., Figini, M., Kokkinos, I., & Alexander, D. C. (2022). *Deformably-Scaled Transposed Convolution*.
- Castro, R., Souto, Y. M., Ogasawara, E., Porto, F., & Bezerra, E. (2021). STConvS2S: Spatiotemporal Convolutional Sequence to Sequence Network for weather forecasting. *Neurocomputing*, 426, 285–298. <https://doi.org/10.1016/j.neucom.2020.09.060>
- Chen, B.-R., Wang, X., Zhu, X., Wang, Q., & Xie, H. (2023). Real-time arrival picking of rock microfracture signals based on convolutional-recurrent neural network and its engineering application. *Journal of Rock Mechanics and Geotechnical Engineering*. <https://doi.org/10.1016/j.jrmge.2023.07.003>
- Chen XiaoNan, Xu Zhiyuan, & Suo Jidong. (2010). Bandpass filter design based on wavelet packet. *2010 International Conference on Image Analysis and Signal Processing*, 75–78. <https://doi.org/10.1109/IASP.2010.5476158>
- Colaboratory. (t.t.).
- Dattatrayam, R. S., Suresh, G., Baidya, P. R., Prakash, R., Gautam, J. L., Shukla, H. P., & Singh, D. (2014). Standards and Methodologies of Seismological Data Generation, Processing and Archival& Guidelines for Data Sharing and Supply. *Proceedings of the Indian National Science Academy*, 80(3), 679. <https://doi.org/10.16943/ptinsa/2014/v80i3/55143>

- Dinov, I. D. (2018). Deep Learning, Neural Networks. Dalam *Data Science and Predictive Analytics* (hlm. 765–817). Springer International Publishing.
https://doi.org/10.1007/978-3-319-72347-1_23
- Dong, H., Supratak, A., Mai, L., Liu, F., Oehmichen, A., Yu, S., & Guo, Y. (2017). TensorLayer. *Proceedings of the 25th ACM international conference on Multimedia*, 1201–1204. <https://doi.org/10.1145/3123266.3129391>
- Fu, J., Wang, X., Li, Z., Meng, H., Wang, J., Wang, W., & Tang, C. (2020). Automatic Phase-Picking Method for Detecting Earthquakes Based on the Signal-to-Noise-Ratio Concept. *Seismological Research Letters*, 91(1), 334–342.
<https://doi.org/10.1785/0220190043>
- Hall, R. (2019). Indonesia, Geology. Dalam *Encyclopedia of Islands* (hlm. 454–460). University of California Press. <https://doi.org/10.1525/9780520943728-104>
- He, K., Zhang, X., Ren, S., & Sun, J. (2015). *Deep Residual Learning for Image Recognition*.
- Hong, E. S., & Newman, S.-F. (2007). Applying Tunstall Coding in the existing SEED format for Seismographic Data. *2007 Data Compression Conference (DCC'07)*, 384–384. <https://doi.org/10.1109/DCC.2007.14>
- Jiang, C., Fang, L., Fan, L., & Li, B. (2021). Comparison of the earthquake detection abilities of PhaseNet and EQTransformer with the Yangbi and Maduo earthquakes. *Earthquake Science*, 34(5), 425–435. <https://doi.org/10.29382/eqs-2021-0038>
- Kanamori, H., & Brodsky, E. E. (2004). The physics of earthquakes. *Reports on Progress in Physics*, 67(8), 1429–1496. <https://doi.org/10.1088/0034-4885/67/8/R03>
- Kapoor, A., Grauman, K., Urtasun, R., & Darrell, T. (2010). Gaussian Processes for Object Categorization. *International Journal of Computer Vision*, 88(2), 169–188.
<https://doi.org/10.1007/s11263-009-0268-3>
- Kiranyaz, S., Avci, O., Abdeljaber, O., Ince, T., Gabbouj, M., & Inman, D. J. (2021). 1D convolutional neural networks and applications: A survey. *Mechanical Systems and Signal Processing*, 151, 107398. <https://doi.org/10.1016/j.ymssp.2020.107398>
- Mahadevaswamy, U. B., & Swathi, P. (2023). Sentiment Analysis using Bidirectional LSTM Network. *Procedia Computer Science*, 218, 45–56.
<https://doi.org/10.1016/j.procs.2022.12.400>
- Matloff, N. (2016). Numerical Python : A Practical Techniques Approach for Industry. *Journal of Statistical Software*, 70(Book Review 4).
<https://doi.org/10.18637/jss.v070.b04>
- Mousavi, S. M., Ellsworth, W. L., Zhu, W., Chuang, L. Y., & Beroza, G. C. (2020). Earthquake transformer—an attentive deep-learning model for simultaneous earthquake detection and phase picking. *Nature Communications*, 11(1), 3952.
<https://doi.org/10.1038/s41467-020-17591-w>

- Parhi, R., & Nowak, R. D. (2020). The Role of Neural Network Activation Functions. *IEEE Signal Processing Letters*, 27, 1779–1783. <https://doi.org/10.1109/LSP.2020.3027517>
- Rahman, Md. M., Shakeri, M., Tiong, S. K., Khatun, F., Amin, N., Pasupuleti, J., & Hasan, M. K. (2021). Prospective Methodologies in Hybrid Renewable Energy Systems for Energy Prediction Using Artificial Neural Networks. *Sustainability*. <https://doi.org/10.3390/su1010000>
- Ross, Z. E., & Ben-Zion, Y. (2014). Automatic picking of direct P, S seismic phases and fault zone head waves. *Geophysical Journal International*, 199(1), 368–381. <https://doi.org/10.1093/gji/ggu267>
- Ross, Z. E., Meier, M., Hauksson, E., & Heaton, T. H. (2018). Generalized Seismic Phase Detection with Deep Learning. *Bulletin of the Seismological Society of America*, 108(5A), 2894–2901. <https://doi.org/10.1785/0120180080>
- Samih, A. R. (2008). Effect of Data Processing on Data Quality. *Journal of Computer Science*, 4(12), 1051–1055. <https://doi.org/10.3844/jcssp.2008.1051.1055>
- Scotto di Uccio, F., Scala, A., Festa, G., Picozzi, M., & Beroza, G. (2022). *Comparing and integrating artificial intelligence and similarity search detection techniques for seismic sequences in Southern Italy*. <https://doi.org/10.1002/essoar.10512172.1>
- Srinivasa Kumar, T., Venkatesan, R., Vedachalam, N., Padmanabham, J., & Sundar, R. (2016). Assessment of the Reliability of the Indian Tsunami Early Warning System. *Marine Technology Society Journal*, 50(3), 92–108. <https://doi.org/10.4031/MTSJ.50.3.12>
- Stephen, K. D., & Kazemi, A. (2014). Improved normalization of time-lapse seismic data using normalized root mean square repeatability data to improve automatic production and seismic history matching in the Nelson field. *Geophysical Prospecting*, 62(5), 1009–1027. <https://doi.org/10.1111/1365-2478.12109>
- Tiampo, K. F., Weatherley, D. K., & Weinstein, S. A. (2008). Earthquakes: Simulations, Sources and Tsunamis. *Pure and Applied Geophysics*, 165(3–4), 449–450. <https://doi.org/10.1007/s00024-008-0332-x>
- Vaswani, A., Brain, G., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., Kaiser, Ł., & Polosukhin, I. (2017). *Attention Is All You Need*.
- Wächter, J., Babeyko, A., Fleischer, J., Häner, R., Hammitzsch, M., Kloth, A., & Lendholt, M. (2012). Development of tsunami early warning systems and future challenges. *Natural Hazards and Earth System Sciences*, 12(6), 1923–1935. <https://doi.org/10.5194/nhess-12-1923-2012>
- Wang, Q., Ma, Y., Zhao, K., & Tian, Y. (2022). A Comprehensive Survey of Loss Functions in Machine Learning. *Annals of Data Science*, 9(2), 187–212. <https://doi.org/10.1007/s40745-020-00253-5>
- Woollam, J., Münchmeyer, J., Tilmann, F., Rietbrock, A., Lange, D., Bornstein, T., Diehl, T., Giunchi, C., Haslinger, F., Jozinović, D., Michelini, A., Saul, J., & Soto, H.

- (2022). SeisBench—A Toolbox for Machine Learning in Seismology. *Seismological Research Letters*, 93(3), 1695–1709. <https://doi.org/10.1785/0220210324>
- Yamashita, R., Nishio, M., Do, R. K. G., & Togashi, K. (2018). Convolutional neural networks: an overview and application in radiology. *Insights into Imaging*, 9(4), 611–629. <https://doi.org/10.1007/s13244-018-0639-9>
- Yang, B., Nazari, R., Elmo, D., Stead, D., & Eberhardt, E. (2023). Data preparation for machine learning in rock engineering. *IOP Conference Series: Earth and Environmental Science*, 1124(1), 012072. <https://doi.org/10.1088/1755-1315/1124/1/012072>
- Yang, J., Li, C., Zhang, P., Dai, X., Xiao, B., Yuan, L., & Gao, J. (2021). Focal Attention for Long-Range Interactions in Vision Transformers. Dalam M. Ranzato, A. Beygelzimer, Y. Dauphin, P. S. Liang, & J. W. Vaughan (Ed.), *Advances in Neural Information Processing Systems* (Vol. 34, hlm. 30008–30022). Curran Associates, Inc.
https://proceedings.neurips.cc/paper_files/paper/2021/file/fc1a36821b02abbd2503fd949bfc9131-Paper.pdf
- Zhang, B., & Rahmat-Samii, Y. (2021). Adaptive Moment (Adam) Estimation Optimization Applied to AVM-FEM for Rapid Convergence. *2021 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (APS/URSI)*, 1451–1452.
<https://doi.org/10.1109/APS/URSI47566.2021.9704089>
- Zhang, J., Zhang, H., Chen, E., Zheng, Y., Kuang, W., & Zhang, X. (2014). Real-time earthquake monitoring using a search engine method. *Nature Communications*, 5(1), 5664. <https://doi.org/10.1038/ncomms6664>
- Zhu, W., & Beroza, G. C. (2018). PhaseNet: A Deep-Neural-Network-Based Seismic Arrival Time Picking Method. *Geophysical Journal International*.
<https://doi.org/10.1093/gji/ggy423>