

DAFTAR REFERENSI

- Abadi, M., Barham, P., Chen, J., Chen, Z., Davis, A., Dean, J. et al. (2016). {TensorFlow}: a system for {Large-Scale} machine learning. In *12th USENIX symposium on operating systems design and implementation (OSDI 16)* (pp. 265-283).
- Akita, R., Yoshihara, A., Matsubara, T., & Uehara, K. (2016, June). Deep learning for stock prediction using numerical and textual information. In *2016 IEEE/ACIS 15th International Conference on Computer and Information Science (ICIS)* (pp. 1-6). IEEE.
- Bao, W., Yue, J., & Rao, Y. (2017). A deep learning framework for financial time series using stacked autoencoders and long-short term memory. *PLoS one*, *12*(7), e0180944.
- Bathla, G. (2020, November). Stock Price prediction using LSTM and SVR. In *2020 Sixth International Conference on Parallel, Distributed and Grid Computing (PDGC)* (pp. 211-214). IEEE.
- Bengio, Y., Simard, P., & Frasconi, P. (1994). Learning long-term dependencies with gradient descent is difficult. *IEEE transactions on neural networks*, *5*(2), 157-166.
- Bengio, Y., Ducharme, R., & Vincent, P. (2000). A neural probabilistic language model. *Advances in neural information processing systems*, *13*.
- Bhattacharjee, N. V., & Tollner, E. W. (2016). Improving management of windrow composting systems by modeling runoff water quality dynamics using recurrent neural network. *Ecological Modelling*, *339*, 68-76.
- Broomhead, D. S., & Lowe, D. (1988). *Radial basis functions, multi-variable functional interpolation and adaptive networks*. Royal Signals and Radar Establishment Malvern (United Kingdom).
- Biondo, A. E., Pluchino, A., Rapisarda, A., & Helbing, D. (2013). Are random trading strategies more successful than technical ones?. *PLoS one*, *8*(7), e68344.
- Chen, J. (2021, 30 April) Guide to Technical Analysis. Investopedia. <https://www.investopedia.com/terms/t/technical-analysis-of-stocks-and-trends.asp>

- Cheng, L. C., Huang, Y. H., & Wu, M. E. (2018, December). Applied attention-based *LSTM* neural networks in stock prediction. In *2018 IEEE International Conference on Big Data (Big Data)* (pp. 4716-4718). IEEE.
- Ding, X., Zhang, Y., Liu, T., & Duan, J. (2015, June). Deep learning for event-driven stock prediction. In *Twenty-fourth international joint conference on artificial intelligence*.
- Dixit, J. (2005). *Fundamentals of Computer Programming and IT*. New Delhi: Laxmi Publications.
- Doetsch, P., Kozielski, M., & Ney, H. (2014, September). Fast and robust training of recurrent neural networks for offline handwriting recognition. In *2014 14th International Conference on Frontiers in Handwriting Recognition* (pp. 279-284). IEEE.
- Domeniconi, G., Masseroli, M., Moro, G., & Pinoli, P. (2016). Cross-organism learning method to discover new gene functionalities. *Computer methods and programs in biomedicine*, *126*, 20-34.
- Domeniconi, G., Moro, G., Pagliarani, A., & Pasolini, R. (2017, November). On Deep Learning in Cross-Domain Sentiment Classification. In *KDIR* (pp. 50-60).
- Donahue, J., Anne Hendricks, L., Guadarrama, S., Rohrbach, M., Venugopalan, S., Saenko, K., & Darrell, T. (2015). Long-term recurrent convolutional networks for visual recognition and description. In *Proceedings of the IEEE conference on computer vision and pattern recognition* (pp. 2625-2634).
- Eapen, J., Bein, D., & Verma, A. (2019, January). Novel deep learning model with CNN and bi-directional *LSTM* for improved stock market index prediction. In *2019 IEEE 9th annual computing and communication workshop and conference (CCWC)* (pp. 0264-0270). IEEE.
- Eldan, R., & Shamir, O. (2016, June). The power of depth for feedforward neural networks. In *Conference on learning theory* (pp. 907-940). PMLR.
- Elder, A. (2008). *Sell and Sell Short* (Vol. 329). John Wiley & Sons.
- Esteva, A., Kuprel, B., Novoa, R. A., Ko, J., Swetter, S. M., Blau, H. M., & Thrun, S. (2017). Dermatologist-level classification of skin cancer with deep neural networks. *nature*, *542*(7639), 115-118.

- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The journal of Finance*, 25(2), 383-417.
- Fan, Y., Qian, Y., Xie, F. L., & Soong, F. K. (2014). TTS synthesis with bidirectional LSTM based recurrent neural networks. In *Fifteenth annual conference of the international speech communication association*.
- Frank, R. J., Davey, N., & Hunt, S. P. (2001). Time series prediction and neural networks. *Journal of intelligent and robotic systems*, 31(1), 91-103.
- Glantz, M., & Kissell, R. (2013). *Multi-asset risk modeling: techniques for a global economy in an electronic and algorithmic trading era*. Academic Press.
- Graves, A., Liwicki, M., Fernández, S., Bertolami, R., Bunke, H., & Schmidhuber, J. (2008). A novel connectionist system for unconstrained handwriting recognition. *IEEE transactions on pattern analysis and machine intelligence*, 31(5), 855-868.
- Graves, A. (2012). Supervised sequence labelling. In *Supervised sequence labelling with recurrent neural networks* (pp. 5-13). Springer, Berlin, Heidelberg.
- Graves, A. (2013). Generating sequences with recurrent neural networks. arXiv preprint arXiv:1308.0850.
- Greff, K., Srivastava, R. K., Koutník, J., Steunebrink, B. R., & Schmidhuber, J. (2016). *LSTM: A search space odyssey*. *IEEE transactions on neural networks and learning systems*, 28(10), 2222-2232.
- Han, Z., Zhao, J., Leung, H., Ma, K. F., & Wang, W. (2019). A review of deep learning models for time series prediction. *IEEE Sensors Journal*, 21(6), 7833-7848.
- Hansson, M. (2017). On stock return prediction with *LSTM* networks.
- Hayes, A. (2021, 21 April) Stock. Investopedia. <https://www.investopedia.com/terms/s/stock.asp>
- Hermans, M., & Schrauwen, B. (2013). Training and analysing deep recurrent neural networks. *Advances in neural information processing systems*, 26.
- Hochreiter, S., & Schmidhuber, J. (1997). Long short-term memory. *Neural computation*, 9(8), 1735-1780.
- Hochreiter, S., Bengio, Y., Frasconi, P., & Schmidhuber, J. (2001). Gradient flow in recurrent nets: the difficulty of learning long-term dependencies.

- Hopfield, J. J. (1982). Neural networks and physical systems with emergent collective computational abilities. *Proceedings of the national academy of sciences*, 79(8), 2554-2558.
- Jimenez, N. (2014, 8 Agustus). *Simple LSTM*. Nico's blog. <https://nicodjimenez.github.io/2014/08/08/lstm.html>
- Kim, H. Y., & Won, C. H. (2018). Forecasting the volatility of stock price index: A hybrid model integrating *LSTM* with multiple GARCH-type models. *Expert Systems with Applications*, 103, 25-37.
- Kohonen, T. (1982). Self-organized formation of topologically correct feature maps. *Biological cybernetics*, 43(1), 59-69.
- Krizhevsky, A., Sutskever, I., and Hinton, G. E. (2012). Imagenet classification with deep convolutional neural networks. In *Proceedings of the 25th International Conference on Neural Information Processing Systems - Volume 1, NIPS'12*, pages 1097–1105, USA. Curran Associates Inc.
- Li, H., Shen, Y., & Zhu, Y. (2018, November). Stock price prediction using attention-based multi-input *LSTM*. In *Asian Conference on Machine Learning* (pp. 454-469). PMLR.
- Lipton, Z. C., Berkowitz, J., & Elkan, C. (2015). A critical review of recurrent neural networks for sequence learning. arXiv preprint arXiv:1506.00019.
- Lo, A. W., & MacKinlay, A. C. (2011). A non-random walk down Wall Street. In *A Non-Random Walk Down Wall Street*. Princeton University Press.
- Luong, M. T., Sutskever, I., Le, Q. V., Vinyals, O., & Zaremba, W. (2014). Addressing the rare word problem in neural machine translation. arXiv preprint arXiv:1410.8206.
- Mahalakshmi, G., Sridevi, S., & Rajaram, S. (2016, January). A survey on forecasting of time series data. In *2016 International Conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE'16)* (pp. 1-8). IEEE.
- Malkiel, B. G. (1973). *A random walk down Wall Street*. W. W.
- Marchi, E., Ferroni, G., Eyben, F., Gabrielli, L., Squartini, S., & Schuller, B. (2014, May). Multi-resolution linear prediction based features for audio onset detection with bidirectional *LSTM* neural networks. In *2014 IEEE international*

- conference on acoustics, speech and signal processing (ICASSP) (pp. 2164-2168). IEEE.
- McCulloch, W. S., & Pitts, W. (1943). A logical calculus of the ideas immanent in nervous activity. *The bulletin of mathematical biophysics*, 5(4), 115-133.
- Mhaskar, H., Liao, Q., & Poggio, T. (2017, February). When and why are deep networks better than shallow ones?. In *Proceedings of the AAAI conference on artificial intelligence* (Vol. 31, No. 1).
- Muslihudin, M. d. (2016). *Analisis dan Perancangan Sistem Informasi Menggunakan Model Terstruktur dan UML*. Yogyakarta: Andi Offset.
- NIST/SEMATECH e-Handbook of Statistical Methods,
<https://www.itl.nist.gov/div898/handbook/pmc/section4/pmc41.htm>,
 19/09/2022
- Pascanu, R., Mikolov, T., & Bengio, Y. (2013, May). On the difficulty of training recurrent neural networks. In *International conference on machine learning* (pp. 1310-1318). PMLR.
- Pedregosa, F., Varoquaux, G., Gramfort, A., Michel, V., Thirion, B., Grisel, O et al. (2011). Scikit-learn: Machine learning in Python. *the Journal of machine Learning research*, 12, 2825-2830.
- Pham, V., Bluche, T., Kermorvant, C., & Louradour, J. (2014, September). Dropout improves recurrent neural networks for handwriting recognition. In 2014 14th international conference on frontiers in handwriting recognition (pp. 285-290). IEEE.
- Ruder, S. (2016). An overview of gradient descent optimization algorithms. arXiv preprint arXiv:1609.04747.
- Rosenblatt, F. (1958). The perceptron: a probabilistic model for information storage and organization in the brain. *Psychological review*, 65(6), 386.
- Rumelhart, D.E., Hinton, G.E., & Williams, R.J. (1986). Learning representations by back-propagating errors. *Nature*, 323, 533-536.
- Rumelhart, D. E., Widrow, B., & Lehr, M. A. (1994). The basic ideas in neural networks. *Communications of the ACM*, 37(3), 87-93.
- Sak, H., Senior, A. W., & Beaufays, F. (2014). Long short-term memory recurrent neural network architectures for large scale acoustic modeling.
- Saham. (n.d.). IDX. <https://www.idx.co.id/produk/saham/>

- Telgarsky, M. (2016, June). Benefits of depth in neural networks. In *Conference on learning theory* (pp. 1517-1539). PMLR.
- Weigend, A. S. (2018). *Time series prediction: forecasting the future and understanding the past*. Routledge.
- Wen, J., Li, S., Lin, Z., Hu, Y., & Huang, C. (2012). Systematic literature review of machine learning based software development effort estimation models. *Information and Software Technology*, 54(1), 41-59.
- Zaremba, W., Sutskever, I., & Vinyals, O. (2014). Recurrent neural network regularization. arXiv preprint arXiv:1409.2329.
- Zhao, Z., Rao, R., Tu, S., & Shi, J. (2017, November). Time-weighted *LSTM* model with redefined labeling for stock trend prediction. In *2017 IEEE 29th international conference on tools with artificial intelligence (ICTAI)* (pp. 1210-1217). IEEE.