

BIBLIOGRAPHY

- [1] “Global Currency (FX) Trading Surges to \$7.5 Trillion a Day, BIS Survey Shows - Bloomberg.” [https://www.bloomberg.com/news/articles/2022-10-27/global-currency-trading-surges-to-7-5-trillion-a-day-bis-says?leadSource=uverify wall](https://www.bloomberg.com/news/articles/2022-10-27/global-currency-trading-surges-to-7-5-trillion-a-day-bis-says?leadSource=uverify%20wall) (accessed Jan. 20, 2023).
- [2] “Winning the Trading Game: Why 95% of Traders Lose and What You Must Do To Win - Noble DraKoln - Google Books.” [https://books.google.co.id/books?hl=en&lr=&id=QsgQL6f8Yb0C&oi=fnd&pg=PR7&dq=DraKoln,+N.+\(2008\).+Winning+the+Trading+Game:+Why+95%25+of+Traders+Lose+and+What+You+Must+Do+to+Win,+Vol.+322,+John+Wiley+%26+Sons&ots=aKrt5rI05e&sig=6tvSffWzIzGUFwxJmFxFxRYRu9IW4&redir_esc=y#v=onepage&q&f=false](https://books.google.co.id/books?hl=en&lr=&id=QsgQL6f8Yb0C&oi=fnd&pg=PR7&dq=DraKoln,+N.+(2008).+Winning+the+Trading+Game:+Why+95%25+of+Traders+Lose+and+What+You+Must+Do+to+Win,+Vol.+322,+John+Wiley+%26+Sons&ots=aKrt5rI05e&sig=6tvSffWzIzGUFwxJmFxFxRYRu9IW4&redir_esc=y#v=onepage&q&f=false) (accessed Jul. 25, 2022).
- [3] S. Hayley and I. W. Marsh, “What do retail FX traders learn?,” *J. Int. Money Financ.*, vol. 64, pp. 16–38, Jun. 2016, doi: 10.1016/J.JIMONFIN.2016.02.001.
- [4] S. Moeeni, “Is It Necessary to Restrict Forex Financial Trading ? A Modified Model 1 Introduction,” vol. 13, no. 1, pp. 63–80, 2019.
- [5] M. J. Pring, “Technical analysis explained : the successful investor’s guide to spotting investment trends and turning points,” p. 797.
- [6] M. S. Islam, E. Hossain, A. Rahman, M. S. Hossain, and K. Andersson, “A review on recent advancements in FOREX currency prediction,” *Algorithms*, vol. 13, no. 8, p. 186, Aug. 2020, doi: 10.3390/A13080186.
- [7] Z. Hu, Y. Zhao, and M. Khushi, “A survey of forex and stock price prediction using deep learning,” *Appl. Syst. Innov.*, vol. 4, no. 1, pp. 1–30, 2021, doi: 10.3390/ASI4010009.
- [8] G. Cohen, “Algorithmic Trading and Financial Forecasting Using Advanced Artificial Intelligence Methodologies,” *Mathematics*, vol. 10, no. 18, 2022, doi: 10.3390/math10183302.
- [9] A. Shavandi and M. Khedmati, “A multi-agent deep reinforcement learning framework for algorithmic trading in financial markets,” *Expert Syst. Appl.*, vol. 208, no. July, p. 118124, 2022, doi: 10.1016/j.eswa.2022.118124.
- [10] C. J. Neely, D. E. Rapach, J. Tu, and G. Zhou, “Forecasting the equity risk premium: The role of technical indicators,” *Manage. Sci.*, vol. 60, no. 7, pp. 1772–1791, Mar. 2014, doi: 10.1287/mnsc.2013.1838.
- [11] L. Menkhoff and M. P. Taylor, “The obstinate passion of foreign exchange professionals: Technical analysis,” *J. Econ. Lit.*, vol. 45, no. 4, pp. 936–972, 2007, doi: 10.1257/jel.45.4.936.
- [12] Y. Yong, D. Ngo, ... Y. L. S. and C. I. 6th, and undefined 2015, “Technical indicators for forex forecasting: a preliminary study,” *Springer*, Accessed: Feb. 02, 2023. [Online]. Available: https://link.springer.com/chapter/10.1007/978-3-319-20469-7_11.
- [13] C. Y. Huang, “Financial Trading as a Game: A Deep Reinforcement Learning Approach,” pp. 1–15, 2018, [Online]. Available: <http://arxiv.org/abs/1807.02787>.
- [14] K. S. Zarkias, N. Passalis, A. Tsantekidis, and A. Tefas, “Deep Reinforcement Learning for Financial Trading Using Price Trailing,” *ICASSP, IEEE Int. Conf. Acoust. Speech Signal Process. - Proc.*, vol. 2019-May, pp. 3067–3071, 2019, doi: 10.1109/ICASSP.2019.8683161.
- [15] F. Rundo, “Deep LSTM with reinforcement learning layer for financial trend prediction in FX high frequency trading systems,” *Appl. Sci.*, vol. 9, no. 20, 2019, doi: 10.3390/app9204460.
- [16] “Forex Trading Broker Online - Alpari International.” <https://www.alpari.org/> (accessed

- Feb. 05, 2023).
- [17] M. A.-A.-G. e-JOURNAL and undefined 2012, "Evaluation of the profitability of technical analysis for Asian currencies in the forex spot market for short-term trading," *assumptionjournal.au.edu*, Accessed: Aug. 09, 2022. [Online]. Available: <http://www.assumptionjournal.au.edu/index.php/AU-GSB/article/view/469>.
- [18] Y. H. Lui and D. Mole, "The use of fundamental and technical analyses by foreign exchange dealers: Hong Kong evidence," *J. Int. Money Financ.*, vol. 17, no. 3, pp. 535–545, 1998, doi: 10.1016/S0261-5606(98)00011-4.
- [19] "Federal Open Market Committee (FOMC): What It Is and Does." <https://www.investopedia.com/terms/f/fomc.asp> (accessed Feb. 05, 2023).
- [20] "How to Trade Forex on News Releases." <https://www.investopedia.com/articles/forex/05/tradingonnews.asp> (accessed Feb. 05, 2023).
- [21] F. Akbarzadeh and A. Soleimani, "Forecasting financial time series trends by pattern recognition," *Int. J. Nonlinear Anal. Appl.*, vol. 0, no. June 2022, pp. 2008–6822, 2022, [Online]. Available: https://ijnaa.semnan.ac.ir/article_6725.html.
- [22] Y. Deng, F. Bao, Y. Kong, Z. Ren, and Q. Dai, "Deep Direct Reinforcement Learning for Financial Signal Representation and Trading," *IEEE Trans. Neural Networks Learn. Syst.*, vol. 28, no. 3, pp. 653–664, 2017, doi: 10.1109/TNNLS.2016.2522401.
- [23] P. Treleaven, M. Galas, and V. Lalchand, "Algorithmic trading review," *Commun. ACM*, vol. 56, no. 11, pp. 76–85, Nov. 2013, doi: 10.1145/2500117.
- [24] X. Li and Z. Peng, "A novel algorithmic trading approach based on reinforcement learning," *Proc. - 2019 11th Int. Conf. Meas. Technol. Mechatronics Autom. ICMTMA 2019*, pp. 394–398, 2019, doi: 10.1109/ICMTMA.2019.00093.
- [25] "Fundamental analysis in the multi-agent trading system | IEEE Conference Publication | IEEE Xplore." <https://ieeexplore.ieee.org/abstract/document/7733396> (accessed Feb. 02, 2023).
- [26] H. J. Wanniarachchi, R. M. S. J. K. Rathnayake, S. G. I. Thilina, G. U. Ganegoda, and I. Manawadu, "Macroeconomic Event Base Expert Advisor for Forex Trades: Through Algo Trading," *21st Int. Conf. Adv. ICT Emerg. Reg. ICter 2021 - Proc.*, pp. 189–194, 2021, doi: 10.1109/ICTER53630.2021.9774804.
- [27] T. Salkar, A. Shinde, N. Tamhankar, and N. Bhagat, "Algorithmic Trading using Technical Indicators," *Proc. - Int. Conf. Commun. Inf. Comput. Technol. ICCICT 2021*, 2021, doi: 10.1109/ICCICT50803.2021.9510135.
- [28] Y. Bengio, P. Simard, and P. Frasconi, "Learning Long-Term Dependencies with Gradient Descent is Difficult," *IEEE Trans. Neural Networks*, vol. 5, no. 2, pp. 157–166, 1994, doi: 10.1109/72.279181.
- [29] H. Zahrah, ... S. S.-... J. on I., and undefined 2020, "The Foreign Exchange Rate Prediction Using Long-Short Term Memory," *soj.telkomuniversity.ac.id*, vol. 6, no. 2, pp. 94–105, 2020, doi: 10.21108/IJOICT.2020.62.538.
- [30] S. Zhelev, D. A.-2019 I. 18th international, and undefined 2019, "Using LSTM neural network for time series predictions in financial markets," *ieeexplore.ieee.org*, Accessed: Jan. 28, 2023. [Online]. Available: <https://ieeexplore.ieee.org/abstract/document/8935009/>.
- [31] Y. Shiao, G. Chakraborty, ... S. C.-2019 I. 10th, and undefined 2019, "Modeling and Prediction of Time-Series-A Case Study with Forex Data," *ieeexplore.ieee.org*, Accessed: Jan. 28, 2023. [Online]. Available: <https://ieeexplore.ieee.org/abstract/document/8923188/>.
- [32] D. Silver *et al.*, "Mastering the game of Go without human knowledge," *Nature*, vol. 550, no. 7676, pp. 354–359, Oct. 2017, doi: 10.1038/nature24270.

- [33] J. Carapuço, R. Neves, and N. Horta, "Reinforcement learning applied to Forex trading," *Appl. Soft Comput. J.*, vol. 73, pp. 783–794, 2018, doi: 10.1016/j.asoc.2018.09.017.
- [34] G. Bingham, W. Macke, and R. Miikkulainen, "Evolutionary optimization of deep learning activation functions," *GECCO 2020 - Proc. 2020 Genet. Evol. Comput. Conf.*, pp. 289–296, 2020, doi: 10.1145/3377930.3389841.
- [35] D. P. Kingma and J. L. Ba, "Adam: A method for stochastic optimization," Dec. 2015, Accessed: Nov. 28, 2020. [Online]. Available: <https://arxiv.org/abs/1412.6980v9>.
- [36] "Pseudocode of the Adam algorithm. | Download Scientific Diagram." https://www.researchgate.net/figure/Pseudocode-of-the-Adam-algorithm_fig1_331712164 (accessed Feb. 24, 2023).
- [37] V. Mnih *et al.*, "Asynchronous methods for deep reinforcement learning," *33rd Int. Conf. Mach. Learn. ICML 2016*, vol. 4, pp. 2850–2869, 2016.
- [38] A. Tsantekidis, N. Passalis, and A. Tefas, "Diversity-driven knowledge distillation for financial trading using Deep Reinforcement Learning," *Neural Networks*, vol. 140, pp. 193–202, 2021, doi: 10.1016/j.neunet.2021.02.026.
- [39] J. Schulman, F. Wolski, P. Dhariwal, A. Radford, and O. Klimov, "Proximal Policy Optimization Algorithms," pp. 1–12, 2017, [Online]. Available: <http://arxiv.org/abs/1707.06347>.
- [40] A. A. Grover and R. S. Gabriel, "Analysis of algorithmic trading with Q-learning in the forex market," *2021 Int. Conf. Emerg. Smart Comput. Informatics, ESCI 2021*, no. 1, pp. 73–77, 2021, doi: 10.1109/ESCI50559.2021.9396948.
- [41] J. B. Chakole, M. S. Kolhe, G. D. Mahapurush, A. Yadav, and M. P. Kurhekar, "A Q-learning agent for automated trading in equity stock markets," *Expert Syst. Appl.*, vol. 163, p. 113761, 2021, doi: 10.1016/j.eswa.2020.113761.
- [42] Z. Zeng and M. Khushi, "Wavelet Denoising and Attention-based RNN- ARIMA Model to Predict Forex Price," *Proc. Int. Jt. Conf. Neural Networks*, Jul. 2020, doi: 10.1109/IJCNN48605.2020.9206832.
- [43] S. Ahmed, S. U. Hassan, N. R. Aljohani, and R. Nawaz, "FLF-LSTM: A novel prediction system using Forex Loss Function," *Appl. Soft Comput.*, vol. 97, p. 106780, Dec. 2020, doi: 10.1016/J.ASOC.2020.106780.
- [44] "The Forex 3-session Trading System Explained." <https://www.investopedia.com/articles/forex/08/3-market-system.asp> (accessed Feb. 06, 2023).