References

Aurélien Géron (2022). Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow. [online] 'O'Reilly Media, Inc.' Available at: https://learning.oreilly.com/library/view/hands-on-machine-learning/9781098125967/ [Accessed 22 Aug. 2025].

Ayd, W. and Harrison, M. (2024). Pandas Cookbook. [online] Packt Publishing Ltd. Available at: https://learning.oreilly.com/library/view/pandas-cookbook/9781836205876/ [Accessed 22 Aug. 2025].

BBC (2024). General election 2024 results in maps and charts. [online] BBC News. Available at: https://www.bbc.co.uk/news/articles/c4nglegege1o.

Bradley, D., Zhang, B.S., Jay, C. and Stewart, A.J. (2023). Choropleth Maps Can Convey Absolute Magnitude through the Range of the Accompanying Colour Legend. *Behaviour & Information Technology*, [online] 43(12), pp.1–17. Available at: https://research.ebsco.com/c/daqibk/viewer/pdf/4nq57jqrnb [Accessed 21 Aug. 2025].

Cremonini, M. (2025). Data Visualization in R and Python. [online] Wiley. Available at: https://learning.oreilly.com/library/view/data-visualization-in/9781394289486/ [Accessed 25 Aug. 2025].

De Mauro, A. (2021). Data Analytics Made Easy: Use Machine Learning and Data Storytelling in Your Work without writing… Any code. [online] S.L.: Packt Publishing Limited. Available at: https://learning.oreilly.com/library/view/data-analytics-made/9781801074155/ [Accessed 14 Aug. 2025].

English, P. (2025). First YouGov MRP since 2024 election shows a hung parliament with Reform UK as largest party. [online] Yougov.co.uk. Available at: https://yougov.co.uk/politics/articles/52437-first-yougov-mrp-since-2024-election-shows-a-hung-parliament-with-reform-uk-as-largest-party [Accessed 30 Jun. 2025].

Fernandez, A., Garcia, S., Herrera, F. and Chawla, N.V. (2018). SMOTE for Learning from Imbalanced Data: Progress and Challenges, Marking the 15-year Anniversary. Journal of Artificial Intelligence Research, [online] 61(61), pp.863–905. Available at: https://www.jair.org/index.php/jair/article/view/11192/26406 [Accessed 23 Aug. 2025].

Hosmer Jr, D., Lemeshow, S. and Sturdivant, R. (2013). Applied Logistic Regression. 3rd ed. [online] www.oreilly.com. Wiley. Available at: https://learning.oreilly.com/library/view/applied-logistic-regression/9781118548356/ [Accessed 25 Aug. 2025].

Kennedy, R., Wojcik, S. and Lazer, D. (2017a). Improving Election Prediction Internationally. *Science*, [online] 355(6324), pp.515–520. Available at: https://www.science.org/doi/10.1126/science.aal2887 [Accessed 20 Aug. 2025].

Liu, R., Yao, X., Guo, C. and Wei, X. (2020). Can We Forecast Presidential Election Using Twitter Data? An Integrative Modelling Approach. Annals of GIS, [online] 27, pp.1–14. Available at: https://www.tandfonline.com/doi/pdf/10.1080/19475683.2020.1829704 [Accessed 20 Aug. 2025].

Lewis-Beck, M.S., Kenny, J., Leiter, D., Murr, A.E., Ogili, O.B., Stegmaier, M. and Tien, C. (2025). Election forecasting: Political Economy Models. International Journal of Forecasting. [online] Available at: https://www.sciencedirect.com/science/article/pii/S0169207025000135 [Accessed 20 Aug. 2025].

Lutz, M. (2025). Learning Python. 6th ed. [online] 'O'Reilly Media, Inc.' Available at: https://learning.oreilly.com/library/view/learning-python-6th/9781098171292/ [Accessed 22 Aug. 2025].

Morita, K., Mizuno, T. and Hiroyuki Kusuhara (2022). Investigation of a Data Split Strategy Involving the Time Axis in Adverse Event Prediction Using Machine Learning. *Journal of Chemical Information and Modeling*, [online] 62(17), pp.3982–3992. Available at: https://arxiv.org/abs/2204.08682 [Accessed 17 Aug. 2025].

Moses, B., Lior Gavish and Vorwerck, M. (2022). Data Quality Fundamentals. [online] 'O'Reilly Media, Inc.' Available at: https://learning.oreilly.com/library/view/data-quality-fundamentals/9781098112035/ [Accessed 20 Aug. 2025].

Müller, A. and Guido, S. (2016). *Introduction to Machine Learning with Python*. [online] O'Reilly Media, Inc. Available at: https://learning.oreilly.com/library/view/introduction-to-machine/9781449369880/ [Accessed 23 Aug. 2025].

Provost, F. and Fawcett, T. (2013). Data Science for Business. [online] O'Reilly Media, Inc. Available at: https://learning.oreilly.com/library/view/data-science-for/9781449374273/ [Accessed 25 Aug. 2025].

Venkatesan, U. *et al*. (2025) 'Evaluation of Logistic Regression and Advanced Machine Learning Algorithms to Differentiate between Type 1 and Type 2 Diabetes in India', *Journal of Diabetology: Official Journal of Diabetes in Asia Study Group*, 16(3), pp. 231–239. doi:10.4103/jod.jod_12_25.

Waskom, M. (2021). Seaborn: Statistical Data Visualization. *Journal of Open Source Software*, [online] 6(60), p.3021. Available at: https://joss.theoj.org/papers/10.21105/joss.03021 [Accessed 25 Aug. 2025].

Data Sources

ONS (2025). Create a Custom Dataset - Office for National Statistics. [online] www.ons.gov.uk. Available at: https://www.ons.gov.uk/datasets/create.

UK Parliament (2024). UK Parliament Election results: General Elections. [online] UK Parliament Election Results. Available at: https://electionresults.parliament.uk/general-elections.

YouGov (2025). *First YouGov MRP since 2024 Election Shows a Hung Parliament with Reform UK as Largest Party*. [online] Yougov.co.uk. Available at: https://yougov.co.uk/politics/articles/52437-first-yougov-mrp-since-2024-election-shows-a-hung-parliament-with-reform-uk-as-largest-party.