

## References

- Barnes, J. 2015. Azure Machine Learning Microsoft Azure Essentials.
- Bateman, A. W., S. J. Peacock, B. Connors, Z. Polk, D. Berg, M. Krkošek, and A. Morton. 2016. Recent failure to control sea louse outbreaks on salmon in the Broughton Archipelago, British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences* 73:1164–1172.
- Böse, J. H., V. Flunkert, J. Gasthaus, T. Januschowski, D. Lange, D. Salinas, S. Schelter, M. Seeger, and Y. Wang. 2017. Probabilistic demand forecasting at scale. *Proceedings of the VLDB Endowment* 10:1694–1705.
- Carbonneau, R., K. Laframboise, and R. Vahidov. 2008. Application of machine learning techniques for supply chain demand forecasting. *European Journal of Operational Research* 184:1140–1154.
- Crone, S. F., M. Hibon, and K. Nikolopoulos. 2011. Advances in forecasting with neural networks? Empirical evidence from the NN3 competition on time series prediction. *International Journal of Forecasting* 27:635–660.
- Dietze, M. C., A. Fox, L. M. Beck-Johnson, J. L. Betancourt, M. B. Hooten, C. S. Jarnevich, T. H. Keitt, M. A. Kenney, C. M. Laney, L. G. Larsen, H. W. Loescher, C. K. Lunch, B. C. Pijanowski, J. T. Randerson, E. K. Read, A. T. Tredennick, R. Vargas, K. C. Weathers, and E. P. White. 2018. Iterative near-term ecological forecasting: Needs, opportunities, and challenges. *Proceedings of the National Academy of Sciences of the United States of America* 115:1424–1432.
- Green, J. L., A. Hastings, P. Arzberger, F. J. Ayala, K. L. Cottingham, K. Cuddington, F. Davis, J. A. Dunne, M.-J. Fortin, L. Gerber, and M. Neubert. 2005. Complexity in Ecology and Conservation: Mathematical, Statistical, and Computational Challenges. *BioScience* 55:501.

- Gu, J., Z. Wang, J. Kuen, L. Ma, A. Shahroudy, B. Shuai, T. Liu, X. Wang, G. Wang, J. Cai, and T. Chen. 2018. Recent advances in convolutional neural networks. *Pattern Recognition* 77:354–377.
- Houlahan, J. E., S. T. McKinney, T. M. Anderson, and B. J. McGill. 2017. The priority of prediction in ecological understanding. *Oikos*:1–7.
- James, G., D. Witten, T. Hastie, and R. Tibshirani. 2013. *An Introduction to Statistical Learning with Applications in R*. Springer, New York.
- Kaundal, R., A. A. Kapoor, and G. P. S. Raghava. 2006. Machine learning techniques in disease forecasting: A case study on rice blast prediction. *BMC Bioinformatics* 7:1–16.
- Kimoto, T., K. Asakawa, M. Yoda, and M. Takeoka. 1990. Stock market prediction system with modular neural networks. Pages 1–6 1990 IJCNN international joint conference on neural networks.
- Krkošek, M., B. M. Connors, A. Morton, M. A. Lewis, L. M. Dill, and R. Hilborn. 2011. Effects of parasites from salmon farms on productivity of wild salmon. *Proceedings of the National Academy of Sciences of the United States of America* 108:14700–14704.
- Makridakis, S., E. Spiliotis, and V. Assimakopoulos. 2018. The M4 Competition : Results , findings , conclusion and way forward The M4 Competition : Results , findings , conclusion and way forward. *International Journal of Forecasting*.
- Marty, G. D., S. M. Saksida, and T. J. Quinn. 2010. Relationship of farm salmon, sea lice, and wild salmon populations. *Proceedings of the National Academy of Sciences of the United States of America* 107:22599–22604.
- Molento, M. B., S. Bennema, J. Bertot, I. C. Pritsch, and A. Arenal. 2018. Bovine fascioliasis in Brazil: Economic impact and forecasting. *Veterinary Parasitology: Regional Studies and*

Reports 12:1–3.

Moritz, S., and T. Bartz-Beielstein. 2017. imputeTS: Time series missing value imputation in R. *R Journal* 9:207–218.

Nevo, S., V. Anisimov, G. Elidan, R. El-Yaniv, P. Giencke, Y. Gigi, A. Hassidim, Z. Moshe, M. Schlesinger, G. Shalev, A. Tirumali, A. Wiesel, O. Zlydenko, and Y. Matias. 2018. ML for Flood Forecasting at Scale. Pages 2–5 32nd Conference on Neural Information Processing Systems.

Peacock, S. J., A. W. Bateman, B. Connors, M. A. Lewis, and M. Krkošek. 2019. Ecology of a marine ectoparasite in farmed and wild salmon. Pages 544–573 *Wildlife Disease Ecology*. Cambridge University Press, Cambridge, UK.

Peacock, S. J., A. W. Bateman, M. Krkošek, B. Connors, S. Rogers, L. Portner, Z. Polk, C. Webb, and A. Morton. 2016. Sea-louse parasites on juvenile wild salmon in the Broughton Archipelago, British Columbia, Canada. *Ecology* 97:1887.

Peacock, S. J., M. Krkosek, S. Proboszcz, C. Orr, and M. A. Lewis. 2013. Cessation of a salmon decline with control of parasites. *Ecological Applications* 23:606–620.

Petukhova, T., D. Ojkic, B. Mcewen, R. Deardon, and Z. Poljak. 2018. Assessment of autoregressive integrated moving average ( ARIMA ), generalized linear autoregressive moving average ( GLARMA ), and random forest ( RF ) time series regression models for predicting influenza A virus frequency in swine in Ontario , Canada. *PLOS ONE*:1–17.

Sainath, T. N., O. Vinyals, A. Senior, and H. Sak. 2015. Convolutional, Long Short-Term Memory, fully connected Deep Neural Networks. ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings 2015-Augus:4580–4584.

Serafin, R. J., and J. W. Wilson. 2000. Operational weather radar in the United States: Progress

- and Opportunity. *Bulletin of the American Meteorological Society* 81:501–518.
- Shaman, J., and A. Karspeck. 2012. Forecasting seasonal outbreaks of influenza. *Proceedings of the National Academy of Sciences of the United States of America* 109:20425–20430.
- Suganthi, L., and A. A. Samuel. 2012. Energy models for demand forecasting — A review. *Renewable and Sustainable Energy Reviews* 16:1223–1240.
- Teschner, F., and C. Weinhardt. 2015. A macroeconomic forecasting market. *Journal of Business Economics* 85:293–317.
- Voyant, C., G. Notton, S. Kalogirou, M. L. Nivet, C. Paoli, F. Motte, and A. Fouilloy. 2017. Machine learning methods for solar radiation forecasting: A review. *Renewable Energy* 105:569–582.
- Wang, G., J. Hao, J. Ma, and H. Jiang. 2011. A comparative assessment of ensemble learning for credit scoring. *Expert Systems with Applications* 38:223–230.
- Wang, Y., A. Smola, D. C. Maddix, J. Gasthaus, D. Foster, and T. Januschowski. 2019. Deep Factors for Forecasting.
- Ward, E. J., H. Chirakkal, M. González-Suárez, D. Aurióles-Gamboa, E. E. Holmes, and L. Gerber. 2010. Inferring spatial structure from time-series data: Using multivariate state-space models to detect metapopulation structure of california sea lions in the gulf of California, Mexico. *Journal of Applied Ecology* 47:47–56.
- Ward, E. J., E. E. Holmes, J. T. Thorson, and B. Collen. 2014. Complexity is costly: A meta-analysis of parametric and non-parametric methods for short-term population forecasting. *Oikos* 123:652–661.
- White, E. P., G. M. Yenni, S. D. Taylor, E. M. Christensen, E. K. Bledsoe, J. L. Simonis, and S. K. M. Ernest. 2019. Developing an automated iterative near-term forecasting system for an

ecological study. *Methods in Ecology and Evolution* 10:332–344.

Wilder, A. P., W. F. Frick, K. E. Langwig, and T. H. Kunz. 2011. Risk factors associated with mortality from white-nose syndrome among hibernating bat colonies. *Biology Letters* 7:950–953.

Zamora-vilchis, I., S. E. Williams, and C. N. Johnson. 2012. Environmental Temperature Affects Prevalence of Blood Parasites of Birds on an Elevation Gradient : Implications for Disease in a Warming Climate. *PLOS ONE* 7.

Zou, H., and T. Hastie. 2005. Erratum: Regularization and variable selection via the elastic net (*Journal of the Royal Statistical Society. Series B: Statistical Methodology* (2005) 67 (301-320)). *Journal of the Royal Statistical Society. Series B: Statistical Methodology* 67:768.