Random citation [1] embeddeed in text. [2] embeddeed in text. [3] embeddeed in text. [4] embeddeed in text. [5] embeddeed in text. [6] embeddeed in text. [7] embeddeed in text. [8] embeddeed in text. [9] embeddeed in text. [10] embeddeed in text. [11] embeddeed in text. [12] embeddeed in text. [13] embeddeed in text. [14] embeddeed in text.

## References

- [1] H. Gan, N. Sang, R. Huang, X. Tong, and Z. Dan, "Using clustering analysis to improve semi-supervised classification," *Neurocomputing*, vol. 101, pp. 290–298, 2013.
- [2] O. Chapelle, B. Scholkopf, and A. Zien, "Semi-supervised learning (chapelle, o. et al., eds.; 2006)[book reviews]," *IEEE Transactions on Neural Networks*, vol. 20, no. 3, pp. 542–542, 2009.
- [3] J. A. Bilmes *et al.*, "A gentle tutorial of the em algorithm and its application to parameter estimation for gaussian mixture and hidden markov models," *International Computer Science Institute*, vol. 4, no. 510, p. 126, 1998.
- [4] C. M. Bishop, "Pattern recognition," Machine Learning, vol. 128, 2006.
- [5] H. Tang and T. S. Huang, "Boosting gaussian mixture models via discriminant analysis," in *Pattern Recognition*, 2008. ICPR 2008. 19th International Conference on, pp. 1–4, IEEE, 2008.
- [6] D. A. Reynolds, T. F. Quatieri, and R. B. Dunn, "Speaker verification using adapted gaussian mixture models," *Digital signal processing*, vol. 10, no. 1, pp. 19–41, 2000.
- [7] L. Breiman, "Bias, variance, and arcing classifiers," 1996.
- [8] M. V. Joshi, R. C. Agarwal, and V. Kumar, "Predicting rare classes: Can boosting make any weak learner strong?," in *Proceedings of the eighth ACM* SIGKDD international conference on Knowledge discovery and data mining, pp. 297–306, ACM, 2002.
- [9] G. Rätsch, T. Onoda, and K.-R. Müller, "Soft margins for adaboost," *Machine learning*, vol. 42, no. 3, pp. 287–320, 2001.
- [10] D. Reynolds, "Gaussian mixture models," *Encyclopedia of biometrics*, pp. 827–832, 2015.
- [11] M. Collins, "The em algorithm," fulfillment of Written Preliminary Exam II requirement, 1997.
- [12] H. He and E. A. Garcia, "Learning from imbalanced data," *IEEE Transactions on knowledge and data engineering*, vol. 21, no. 9, pp. 1263–1284, 2009.
- [13] J. Alcalá-Fdez, L. Sanchez, S. Garcia, M. J. del Jesus, S. Ventura, J. M. Garrell, J. Otero, C. Romero, J. Bacardit, V. M. Rivas, et al., "Keel: a software tool to assess evolutionary algorithms for data mining problems," Soft Computing, vol. 13, no. 3, pp. 307–318, 2009.

- [14] M. Galar, A. Fernandez, E. Barrenechea, H. Bustince, and F. Herrera, "A review on ensembles for the class imbalance problem: bagging-, boosting-, and hybrid-based approaches," *IEEE Transactions on Systems, Man, and Cybernetics, Part C (Applications and Reviews)*, vol. 42, no. 4, pp. 463–484, 2012.
- [15] G. Forman, "An extensive empirical study of feature selection metrics for text classification," *Journal of machine learning research*, vol. 3, no. Mar, pp. 1289–1305, 2003.