

8 Summary and Future Work

References

- Alshdaifat, E., Al-hassan, M. and Aloqaily, A. (2021). Effective heterogeneous ensemble classification: An alternative approach for selecting base classifiers, *ICT Express* **7**(3): 342–349.
- Baumann, A., Lessmann, S., Coussement, K. and De Bock, K. W. (2015). Maximize what matters: Predicting customer churn with decision-centric ensemble selection.
- Breiman, L. (2001). Random forests, *Machine learning* **45**: 5–32.
- Cruz, R. M., Sabourin, R. and Cavalcanti, G. D. (2018). Dynamic classifier selection: Recent advances and perspectives, *Information Fusion* **41**: 195–216.
- Dong, X., Yu, Z., Cao, W., Shi, Y. and Ma, Q. (2020). A survey on ensemble learning, *Frontiers of Computer Science* **14**(2): 241–258.
- Ganaie, M., Hu, M. et al. (2021). Ensemble deep learning: A review, *arXiv preprint arXiv:2104.02395*.
- Garipov, T., Izmailov, P., Podoprikin, D., Vetrov, D. and Wilson, A. G. (2018). Loss surfaces, mode connectivity, and fast ensembling of dnns, *Proceedings of the 32nd International Conference on Neural Information Processing Systems*, pp. 8803–8812.
- Guo, H., Liu, H., Li, R., Wu, C., Guo, Y. and Xu, M. (2018). Margin & diversity based ordering ensemble pruning, *Neurocomputing* **275**: 237–246.
- Hajdu, A., Terdik, G., Tiba, A. and Tomán, H. (2022). A stochastic approach to handle resource constraints as knapsack problems in ensemble pruning, *Machine Learning* pp. 1–45.
- Huang, G., Li, Y., Pleiss, G., Liu, Z., Hopcroft, J. E. and Weinberger, K. Q. (2017). Snapshot ensembles: Train 1, get m for free, *arXiv preprint arXiv:1704.00109*.
- Hussain, M. and Mahmud, I. (2019). pymannkendall: a python package for non parametric mann kendall family of trend tests., *Journal of Open Source Software* **4**(39): 1556.
URL: <http://dx.doi.org/10.21105/joss.01556>
- Ioffe, S. and Szegedy, C. (2015). Batch normalization: Accelerating deep network training by reducing internal covariate shift, *International conference on machine learning*, pmlr, pp. 448–456.
- LeCun, Y., Bottou, L., Bengio, Y. and Haffner, P. (1998). Gradient-based learning applied to document recognition, *Proceedings of the IEEE* **86**(11): 2278–2324.
- Li, D., Zhang, Z. and Wen, G. (2023). Classifier subset selection based on classifier representation and clustering ensemble, *Applied Intelligence* pp. 1–23.
- Nguyen, T. T., Luong, A. V., Dang, M. T., Liew, A. W.-C. and McCall, J. (2020). Ensemble selection based on classifier prediction confidence, *Pattern Recognition* **100**: 107104.
- Opitz, D. and Maclin, R. (1999). Popular ensemble methods: An empirical study, *Journal of artificial intelligence research* **11**: 169–198.
- Paszke, A., Gross, S., Massa, F., Lerer, A., Bradbury, J., Chanan, G., Killeen, T., Lin, Z., Gimelshein, N., Antiga, L. et al. (2019). Pytorch: An imperative style, high-performance deep learning library, *Advances in neural information processing systems* **32**: 8026–8037.
- Pedregosa, F., Varoquaux, G., Gramfort, A., Michel, V., Thirion, B., Grisel, O., Blondel, M., Prettenhofer, P., Weiss, R., Dubourg, V., Vanderplas, J., Passos, A., Cournapeau, D., Brucher, M., Perrot, M. and Duchesnay, E. (2011). Scikit-learn: Machine learning in Python, *Journal of Machine Learning Research* **12**: 2825–2830.
- Pouyanfar, S., Sadiq, S., Yan, Y., Tian, H., Tao, Y., Reyes, M. P., Shyu, M.-L., Chen, S.-C. and Iyengar, S. S. (2018). A survey on deep learning: Algorithms, techniques, and applications, *ACM Computing Surveys (CSUR)* **51**(5): 1–36.
- Procopio, M. J., Mulligan, J. and Grudic, G. (2008). Learning in dynamic environments with ensemble selection for autonomous outdoor robot navigation, *2008 IEEE/RSJ International Conference on Intelligent Robots and Systems*, IEEE, pp. 620–627.

- Qian, C., Yu, Y. and Zhou, Z.-H. (2015). Pareto ensemble pruning, *Proceedings of the AAAI Conference on Artificial Intelligence*, Vol. 29.
- Sreenath, M. and Udhayan, J. (2015). Intrusion detection system using bagging ensemble selection, *2015 IEEE International Conference on Engineering and Technology (ICETECH)*, IEEE, pp. 1–4.
- Sun, Q. and Pfahringer, B. (2011). Bagging ensemble selection, *AI 2011: Advances in Artificial Intelligence: 24th Australasian Joint Conference, Perth, Australia, December 5-8, 2011. Proceedings 24*, Springer, pp. 251–260.
- Tanveer, M., Rashid, A. H., Ganaie, M., Reza, M., Razzak, I. and Hua, K.-L. (2021). Classification of alzheimer’s disease using ensemble of deep neural networks trained through transfer learning, *IEEE Journal of Biomedical and Health Informatics* **26**(4): 1453–1463.
- Tanveer, M., Rashid, A. H., Kumar, R. and Balasubramanian, R. (2022). Parkinson’s disease diagnosis using neural networks: Survey and comprehensive evaluation, *Information Processing & Management* **59**(3): 102909.
- Tanveer, M., Richhariya, B., Khan, R. U., Rashid, A. H., Khanna, P., Prasad, M. and Lin, C. (2020). Machine learning techniques for the diagnosis of alzheimer’s disease: A review, *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)* **16**(1s): 1–35.
- Tewari, S. and Dwivedi, U. (2020). A comparative study of heterogeneous ensemble methods for the identification of geological lithofacies, *Journal of Petroleum Exploration and Production Technology* **10**(5): 1849–1868.
- Tsoumakas, G., Angelis, L. and Vlahavas, I. (2005). Selective fusion of heterogeneous classifiers, *Intelligent Data Analysis* **9**(6): 511–525.
- Tsoumakas, G., Partalas, I. and Vlahavas, I. (2008). A taxonomy and short review of ensemble selection, *Workshop on Supervised and Unsupervised Ensemble Methods and Their Applications*, pp. 1–6.
- Van Rossum, G. and Drake Jr, F. L. (1995). *Python reference manual*, Centrum voor Wiskunde en Informatica Amsterdam.
- Yang, J., Shi, R., Wei, D., Liu, Z., Zhao, L., Ke, B., Pfister, H. and Ni, B. (2021). Medmnist v2: A large-scale lightweight benchmark for 2d and 3d biomedical image classification, *arXiv preprint arXiv:2110.14795*.
- Zhang, Y., Burer, S., Nick Street, W., Bennett, K. P. and Parrado-Hernández, E. (2006). Ensemble pruning via semi-definite programming., *Journal of machine learning research* **7**(7).
- Zouggar, T. and Adla, A. (2019). A diversity-accuracy measure for homogenous ensemble selection.