

DAFTAR PUSTAKA

- [1] D. L. S. S. F. H. L. da Schomer, *Niedermeyer's Electroencephalography, Basic Principles, Clinical Applications, and Related Fields (7 ed.)*, vol. 16, no. 3. 2017. doi: 10.1016/j.fldmyc.2015.06.011.
- [2] J. R. Wolpaw and C. B. Boulay, "Brain Signals for Brain-Computer Interfaces," in *Brain-Computer Interfaces*, vol. 1, 2009, pp. 29–46. doi: 10.1007/978-3-642-02091-9_2.
- [3] J. R. Wolpaw, "Brain-computer interfaces as new brain output pathways," *Journal of Physiology*, vol. 579, no. 3, pp. 613–619, 2007, doi: 10.1113/jphysiol.2006.125948.
- [4] A. Bashashati, M. Fatourehchi, R. K. Ward, and G. E. Birch, "A survey of signal processing algorithms in brain-computer interfaces based on electrical brain signals," *Journal of Neural Engineering*, vol. 4, no. 2, 2007, doi: 10.1088/1741-2560/4/2/R03.
- [5] J. Luo, Z. Feng, J. Zhang, and N. Lu, "Dynamic frequency feature selection based approach for classification of motor imageries," *Computers in Biology and Medicine*, vol. 75, pp. 45–53, 2016, doi: 10.1016/j.combiomed.2016.03.004.
- [6] J. Luo, Z. Feng, and N. Lu, "Spatio-temporal discrepancy feature for classification of motor imageries," *Biomedical Signal Processing and Control*, vol. 47, pp. 137–144, 2019, doi: 10.1016/j.bspc.2018.07.003.
- [7] J. Wang, Z. Feng, N. Lu, and J. Luo, "Toward optimal feature and time segment selection by divergence method for EEG signals classification," *Computers in Biology and Medicine*, vol. 97, no. January, pp. 161–170, 2018, doi: 10.1016/j.combiomed.2018.04.022.
- [8] W. A. W Azlan and Y. F. Low, "Feature extraction of electroencephalogram (EEG) signal - A review," *IECBES 2014, Conference Proceedings - 2014 IEEE Conference on Biomedical Engineering and Sciences: "Miri, Where Engineering in Medicine and Biology and Humanity Meet,"* no. December, pp. 801–806, 2014, doi: 10.1109/IECBES.2014.7047620.

- [9] H. U. Amin, W. Mumtaz, A. R. Subhani, M. N. M. Saad, and A. S. Malik, "Classification of EEG signals based on pattern recognition approach," *Frontiers in Computational Neuroscience*, vol. 11, no. November, 2017, doi: 10.3389/fncom.2017.00103.
- [10] M. Bentlemsan, E. Zemouri, D. Bouchaffra, B. Yahya-zoubir, and K. Ferroudji, "Random Forest and Filter Bank Common Spatial Patterns for EEG-Based Motor Imagery Classification Random Forest and Filter Bank Common Spatial Patterns for EEG-Based Motor Imagery Classification," in *2014 5th International Conference on Intelligent Systems, Modelling and Simulation*, 2014, no. March 2018. doi: 10.1109/ISMS.2014.46.
- [11] M. H. Joy, M. H. B, A. Saleh, and M. Miah, *Multiclass MI-Task Classification Using Logistic Regression and Filter Bank Common Spatial*. Springer Singapore. doi: 10.1007/978-981-15-6648-6.
- [12] A. S. Al-Fahoum and A. A. Al-Fraihat, "Methods of EEG Signal Features Extraction Using Linear Analysis in Frequency and Time-Frequency Domains," *ISRN Neuroscience*, vol. 2014, no. February 2014, pp. 1–7, 2014, doi: 10.1155/2014/730218.
- [13] A. A. Falaki and S. H. Fakharmoosavy, "Impact of Sampling Features on EEG Classification," *IJCSNS International Journal of Computer Science and Network Security*, vol. 17, no. 11, pp. 62–67, 2017.
- [14] S. R. Sreeja, J. Rabha, K. Y. Nagarjuna, D. Samanta, P. Mitra, and M. Sarma, "Motor Imagery EEG Signal Processing and Classification Using Machine Learning Approach," *Proceedings - 2017 International Conference on New Trends in Computing Sciences, ICTCS 2017*, vol. 2018-Janua, pp. 61–66, 2017, doi: 10.1109/ICTCS.2017.15.
- [15] K. Wang *et al.*, "MEP analysis of hand motor imagery with bimanual coordination under transcranial magnetic stimulation," *Journal of Advanced Computational Intelligence and Intelligent Informatics*, vol. 20, no. 3, pp. 462–466, 2016, doi: 10.20965/jaciii.2016.p0462.
- [16] A. Vyas, G. Mishra, S. Tiwari, R. Upadhyay, and P. K. Padhy, "Classification of two mental states using Electroencephalogram signals," *CARE 2013 - 2013 IEEE*

International Conference on Control, Automation, Robotics and Embedded Systems, Proceedings, 2013, doi: 10.1109/CARE.2013.6733769.

- [17] K. Wang, M. Xu, S. Zhang, Y. Ke, and D. Ming, "Analysis and Classification for EEG Patterns of Force Motor Imagery Using Movement Related Cortical Potentials," *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS*, vol. 2018-July, pp. 211–214, 2018, doi: 10.1109/EMBC.2018.8512184.
- [18] J. Wang, Z. Feng, N. Lu, L. Sun, and J. Luo, "An information fusion scheme based common spatial pattern method for classification of motor imagery tasks," *Biomedical Signal Processing and Control*, vol. 46, pp. 10–17, 2018, doi: 10.1016/j.bspc.2018.06.008.
- [19] M. Mohammadpour, M. K. Ghorbanian, and S. Mozaffari, "Comparison of EEG signal features and ensemble learning methods for motor imagery classification," *2016 8th International Conference on Information and Knowledge Technology, IKT 2016*, pp. 288–292, 2016, doi: 10.1109/IKT.2016.7777767.
- [20] Y. Liu, H. Zhang, M. Chen, and L. Zhang, "A boosting-based spatial-spectral model for stroke patients' EEG analysis in rehabilitation training," *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, vol. 24, no. 1, pp. 169–179, 2016, doi: 10.1109/TNSRE.2015.2466079.
- [21] R. Zhang *et al.*, "A new motor imagery EEG classification method FB-TRCSP+RF based on CSP and random forest," *IEEE Access*, vol. 6, pp. 44944–44950, 2018, doi: 10.1109/ACCESS.2018.2860633.
- [22] K. Anam, M. Nuh, and A. Al-Jumaily, "Comparison of EEG pattern recognition of motor imagery for finger movement classification," *International Conference on Electrical Engineering, Computer Science and Informatics (EECSI)*, pp. 24–27, 2019, doi: 10.23919/EECSI48112.2019.8977037.
- [23] M. Dai, S. Wang, D. Zheng, R. Na, and S. Zhang, "Domain Transfer Multiple Kernel Boosting for Classification of EEG Motor Imagery Signals," *IEEE Access*, vol. 7, pp. 49951–49960, 2019, doi: 10.1109/ACCESS.2019.2908851.
- [24] J. S. R. Archila and A. D. Orjuela-Canon, "Machine learning techniques for detecting motor imagery in upper limbs," *2020 IEEE Colombian Conference on*

- Applications of Computational Intelligence, ColCACI 2020 - Proceedings*, 2020, doi: 10.1109/ColCACI50549.2020.9247869.
- [25] S. B. Lee, M. K. Jung, H. Kim, S. W. Lee, and D. J. Kim, "Complex Motor Imagery-based Brain-Computer Interface System: A Comparison between Different Classifiers," *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 2020-October, pp. 2496–2501, 2020, doi: 10.1109/SMC42975.2020.9282984.
- [26] M. Vijay, A. Kashyap, A. Nagarkatti, S. Mohanty, R. Mohan, and N. Krupa, "Extreme Gradient Boosting Classification of Motor Imagery using Common Spatial Patterns," *2020 IEEE 17th India Council International Conference, INDICON 2020*, 2020, doi: 10.1109/INDICON49873.2020.9342132.
- [27] E. Scientific, P. Ireland, and A. Sciences, "The quantitative extraction and topographic mapping of the abnormal components in the clinical EEG," vol. 79, pp. 440–447, 1991.
- [28] N. Korhan, Z. Dokur, and T. Olmez, "Motor imagery based EEG classification by using common spatial patterns and convolutional neural networks," *2019 Scientific Meeting on Electrical-Electronics and Biomedical Engineering and Computer Science, EBBT 2019*, pp. 1–4, 2019, doi: 10.1109/EBBT.2019.8741832.
- [29] M. R. Camana Acosta, S. Ahmed, C. E. Garcia, and I. Koo, "Extremely randomized trees-based scheme for stealthy cyber-attack detection in smart grid networks," *IEEE Access*, vol. 8, no. M1, pp. 19921–19933, 2020, doi: 10.1109/ACCESS.2020.2968934.
- [30] M. Kuhn and K. Johnson, *Applied Predictive Modeling*, 1st ed., vol. 1. New York: Springer Nature, 2016.
- [31] Josh Cutler and M. Dickenson, "Introduction to Machine Learning with Python," in *Computational Frameworks for Political and Social Research with Python*, vol. 1, 2020, pp. 129–142. doi: 10.1007/978-3-030-36826-5_10.
- [32] Mia Huljanah, Zuherman Rustam, Suarsih Utama, and Titin Siswantining, "Feature Selection using Random Forest Classifier for Predicting Prostate Cancer Feature Selection using Random Forest Classifier for Predicting Prostate Cancer," in *IOP Conference Series: Materials Science and Engineering*, 2019, pp. 1–8. doi: 10.1088/1757-899X/546/5/052031.

- [33] Geoffrey I. Webb, *Encyclopedia of Machine Learning*. New York: Springer International Publishing, 2011. doi: 10.1007/978-0-387-30164-8.
- [34] R. Richman and M. V. Wüthrich, “Nagging predictors,” *Risks*, vol. 8, no. 3, pp. 1–26, 2020, doi: 10.3390/risks8030083.
- [35] Y. L. Pavlov, “Random forests,” *Random Forests*, pp. 1–122, 2019, doi: 10.1201/9780429469275-8.
- [36] D. J. Diaz-Romero, A. M. R. Rincon, A. Miguel-Cruz, N. Yee, and E. Stroulia, “Recognizing Emotional States With Wearables While Playing A Serious Game,” *IEEE Transactions on Instrumentation and Measurement*, vol. 9456, no. c, pp. 1–1, 2021, doi: 10.1109/tim.2021.3059467.
- [37] C. Tang, T. Xu, P. Chen, Y. He, A. Bezerianos, and H. Wang, “A Channel Selection Method for Event Related Potential Detection based on Random Forest and Genetic Algorithm,” in *2020 Chinese Automation Congress (CAC)*, 2021, pp. 5419–5424. doi: 10.1109/cac51589.2020.9327820.
- [38] E. K. Ampomah, Z. Qin, and G. Nyame, “Evaluation of tree-based ensemble machine learning models in predicting stock price direction of movement,” *Information (Switzerland)*, vol. 11, no. 6, 2020, doi: 10.3390/info11060332.
- [39] P. Geurts, D. Ernst, and L. Wehenkel, “Extremely randomized trees,” *Machine Learning*, vol. 63, no. 1, pp. 3–42, 2006, doi: 10.1007/s10994-006-6226-1.
- [40] R. E. Schapire and Y. Singer, “Improved boosting algorithms using confidence-rated predictions,” *Machine Learning*, vol. 37, no. 3, pp. 297–336, 1999, doi: 10.1023/A:1007614523901.
- [41] Y. Freund and R. E. Schapire, “Experiments with a New Boosting Algorithm,” *Proceedings of the 13th International Conference on Machine Learning*, pp. 148–156, 1996, doi: 10.1.1.133.1040.
- [42] J. H. Friedman, “Greedy function approximation: A gradient boosting machine,” *Annals of Statistics*, vol. 29, no. 5, pp. 1189–1232, 2001, doi: 10.1214/aos/1013203451.
- [43] A. Natekin and A. Knoll, “Gradient boosting machines, a tutorial,” *Frontiers in Neurorobotics*, vol. 7, no. DEC, 2013, doi: 10.3389/fnbot.2013.00021.

- [44] E. F. Ian H. Witten, *Data Mining: Practical Machine Learning Tools and Techniques (Morgan Kaufmann Series in Data Management Systems)*, 4th ed. United States of America: Microsoft Research, Elsevier Inc, 2019.
- [45] J. Cao, J. Zhu, W. Hu, A. Kummert, and S. Member, "Epileptic Signal Classification With Deep EEG Features by Stacked CNNs," *IEEE Transactions on Cognitive and Developmental Systems*, vol. 12, no. 4, pp. 709–722, 2020.
- [46] D. Hu, J. Cao, and X. Lai, "Epileptic Signal Classification Based on Synthetic Minority Oversampling and Blending Algorithm," *IEEE Transactions on Cognitive and Developmental Systems*, vol. 13, no. 2, pp. 368–382, 2021.
- [47] E. Marshall, B. Marquier Reviewer, and C. Knox, "Non-parametric equivalent to repeated measures ANOVA - Friedman," 2020. [Online]. Available: www.statstutor.ac.uk
- [48] S. Siegel, "Nonparametric Statistics," *American Statistician*, vol. 11, no. 3, pp. 13–19, 1957, doi: 10.1080/00031305.1957.10501091.
- [49] C. Zaiontz, "Friedman Test," *Real Statistics*, 2020.
- [50] Newsom, "Post Hoc Test," *Univariate Quantitative Methods*, no. 1967, pp. 1–4, 2020.
- [51] Clemens Brunner, "BCI Competition IV," 2008. <http://www.bbc.de/competition/iv>
- [52] C. Brunner and R. Leeb, "BCI Competition IV 2008 – Graz data set A," pp. 1–6, 2008.
- [53] S. Valipour, A. D. Shaligram, and G. R. Kulkarni, "Detection of an alpha rhythm of EEG signal based on EEGLAB," 2014. [Online]. Available: www.ijera.com
- [54] R. E. S. Freund, Yoav, "A Decision-Theoretic Generalization of On-Line Learning and an Application to Boosting," *Journal of Computer and System Sciences*, vol. 139, pp. 119–139, 55AD, doi: 10.1145/2818346.2823306.
- [55] J. Cohen, "A coefficient of agreement for nominal scales," *Educational and Psychological Measurement*, vol. 20, no. 1, pp. 37–46 ST-A coefficient of agreement for nominal, 1960.