BIBLIOGRAPHICAL REFERENCES

[1]   L. P. Wijesinghe, D. S. Wickramasuriya, and A. A. Pasqual, "A generalized preprocessing and feature extraction platform for scalp EEG signals on FPGA," *IECBES 2014, Conf. Proc. - 2014 IEEE Conf. Biomed. Eng. Sci. "Miri, Where Eng. Med. Biol. Humanit. Meet,"* no. December, pp. 137–142, 2015.

[2]   B. Wang, C. M. Wong, F. Wan, P. U. Mak, P. I. Mak, and M. I. Vai, "Comparison of different classification methods for EEG-based brain computer interfaces: A case study," *2009 IEEE Int. Conf. Inf. Autom. ICIA 2009*, pp. 1416–1421, 2009.

[3]   S. Gupta and H. Saini, "EEG features extraction using PCA plus LDA approach based on L1-norm for motor imaginary classification," *2014 IEEE Int. Conf. Comput. Intell. Comput. Res. IEEE ICCIC 2014*, 2015.

[4]   A. Bhardwaj, A. Gupta, P. Jain, A. Rani, and J. Yadav, "Classification of human emotions from EEG signals using SVM and LDA Classifiers," *2015 2nd Int. Conf. Signal Process. Integr. Networks*, pp. 180–185, 2015.

[5] A. L. Goldberger, "The Sleep-EDF Database," *physionet.org.* [Online]. Available: http://www.physionet.org/physiobank/database/sleep-edfx/. [Accessed: Dec. 27, 2018].

[6]   M. Vatankhah, M. R. Akbarzadeh-T., and A. Moghimi, "An intelligent system for diagnosing sleep stages using wavelet coefficients," *Proc. Int. Jt. Conf. Neural Networks*, pp. 0–4, 2010.

[7]   I. Güler and E. D. Übeyli, "Adaptive neuro-fuzzy inference system for classification of EEG signals using wavelet coefficients," *J. Neurosci. Methods*, vol. 148, no. 2, pp. 113–121, 2005.

[8]   W. S. Almuhammadi, K. A. I. Aboalayon, and M. Faezipour, "Efficient Obstructive Sleep Apnea Classification Based on EEG Signals," 2015.

 [9] K Hong, "Data Compression Via Dimensionality Reduction - Linear Discriminant Analysis   (LDA),"   2016.   *bogotobogo,com*   [Online].   Available: https://www.bogotobogo.com/python/scikit-learn/scikit_machine_learning_Data_Compresssion_via_Dimensionality_Reduction_2_Linear_Discriminant_Analysis.php. [Accessed: Dec. 27, 2018].

[10] Z. Hussain and K. N. Parvin, "Q-Format Data Representation and Its Arithmetic," vol. 7109, pp. 57–62, 2016.

[11] S. Sam, "Fixed Point Arithmetic Modules," *opencores.org*, Jan 23, 2018.[Online]. Available: https://opencores.org/projects/fixed_point_arithmetic_parameterized. [Accessed: Dec. 27, 2018].

[12] C. Felton, "A Fixed-Point Introduction by Example," *dsprelated.com*, April 25, 2011. [Online]. Available: https://www.dsprelated.com/showarticle/139.php. [Accessed: Dec. 27, 2018].

[13] C. Vidaurre, A. Schloegl, B. Blankertz, M. Kawanabe, and K.-R. Müller, "Unsupervised adaptation of the LDA classifier for Brain-Computer Interfaces.," *Computer (Long. Beach. Calif).*, vol. 2008, no. 2, pp. 1–6, 2008.