

DAFTAR PUSTAKA

- [1] K. Kim and A. G. Parlos, "Induction motor *Fault* diagnosis based on neuropredictors and wavelet signal processing," *IEEE/ASME Trans. Mechatronics*, vol. 7, no. 2, pp. 201–219, 2002, doi: 10.1109/TMECH.2002.1011258.
- [2] A. Glowacz, "Acoustic based *Fault* diagnosis of three-phase induction motor," *Appl. Acoust.*, vol. 137, no. 16, pp. 82–89, 2018, doi: 10.1016/j.apacoust.2018.03.010.
- [3] A. Glowacz, "*Fault* diagnosis of *Single*-phase induction motor based on acoustic signals," *Mech. Syst. Signal Process.*, vol. 117, no. August 2018, pp. 65–80, 2019, doi: 10.1016/j.ymsp.2018.07.044.
- [4] G. H. Bazan, P. R. Scalassara, W. Endo, A. Goedtel, W. F. Godoy, and R. H. C. Palácios, "Stator *Fault* analysis of three-phase induction motors using information measures and artificial neural networks," *Electr. Power Syst. Res.*, vol. 143, pp. 347–356, 2017, doi: 10.1016/j.epsr.2016.09.031.
- [5] R. Liu, B. Yang, E. Zio, and X. Chen, "Artificial intelligence for *Fault* diagnosis of rotating machinery: A review," *Mech. Syst. Signal Process.*, vol. 108, pp. 33–47, 2018, doi: 10.1016/j.ymsp.2018.02.016.
- [6] A. Moosavian, H. Ahmadi, A. Tabatabaefar, and M. Khazaei, "Comparison of two classifiers; K-nearest neighbor and artificial neural network, for *Fault* diagnosis on a main engine journal-bearing," *Shock Vib.*, vol. 20, no. 2, pp. 263–272, 2013, doi: 10.3233/SAV-2012-00742.
- [7] A. Stetco *et al.*, "*Machine learning* methods for wind turbine condition monitoring: A review," *Renew. Energy*, vol. 133, pp. 620–635, 2019, doi: 10.1016/j.renene.2018.10.047.
- [8] Y. Fuqing, *Failure diagnostics using support vector machine*. 2011.
- [9] F. Aswin, I. Dwisaputra, and R. Afriansyah, "Online vibration monitoring system for rotating machinery based on 3-axis MEMS accelerometer," *J. Phys. Conf. Ser.*, vol. 1450, no. 1, 2020, doi: 10.1088/1742-6596/1450/1/012109.
- [10] R. Keith Mobley, *An introduction to predictive maintenance*, vol. 42, no. 6.

- 2001.
- [11] B. R. Berli Purnama Kamiel, Kurniawan Budi Wicaksono, “Deteksi Cacat Roda Gigi Pada Sistem Transmisi Fan Industri Menggunakan Support Vector Machine,” no. March, pp. 449–460, 2020.
- [12] J. Yu, “Machinery *Fault* diagnosis using joint global and local/nonlocal discriminant analysis with selective ensemble learning,” *J. Sound Vib.*, vol. 382, pp. 340–356, 2016, doi: 10.1016/j.jsv.2016.06.046.
- [13] A. Bazdar, R. B. Kazemzadeh, and S. T. A. Niaki, “*Fault* diagnosis within multistage machining processes using linear discriminant analysis: a case study in automotive industry,” *Qual. Technol. Quant. Manag.*, vol. 14, no. 2, pp. 129–141, 2017, doi: 10.1080/16843703.2016.1208486.
- [14] A. Tharwat, “Linear vs. quadratic discriminant analysis classifier: a tutorial,” *Int. J. Appl. Pattern Recognit.*, vol. 3, no. 2, p. 145, 2016, doi: 10.1504/ijapr.2016.079050.
- [15] B. Ghojogh and M. Crowley, “Linear and Quadratic Discriminant Analysis: Tutorial,” no. 4, pp. 1–16, 2019, [Online]. Available: <http://arxiv.org/abs/1906.02590>.
- [16] T. Ramayah, N. H. Ahmad, H. A. Halim, S. Rohaida, M. Zainal, and M. Lo, “Discriminant analysis : An illustrated example,” *African J. Bus. Manag.*, vol. 4, no. 9, pp. 1654–1667, 2010.
- [17] Q. Lv, X. Yu, H. Ma, J. Ye, W. Wu, and X. Wang, “Applications of *machine learning* to reciprocating compressor *Fault* diagnosis: A review,” *Processes*, vol. 9, no. 6, 2021, doi: 10.3390/pr9060909.
- [18] D. D. Susilo, A. Widodo, T. Prahasto, and M. Nizam, “*Fault* diagnosis of roller *bearing* using parameter evaluation technique and multi-class support vector machine,” *AIP Conf. Proc.*, vol. 1788, no. January 2017, 2017, doi: 10.1063/1.4968334.
- [19] A. Arauzo-Azofra, J. M. Benitez, and J. L. Castro, “A Feature Set Measure Based on Relief,” pp. 104–109, 2004.
- [20] P. Ghosh *et al.*, “Efficient prediction of cardiovascular disease using *machine learning* algorithms with relief and lasso feature selection techniques,” *IEEE Access*, vol. 9, pp. 19304–19326, 2021, doi:

10.1109/ACCESS.2021.3053759.

- [21] G. K. Singh and S. A. S. Al Kazzaz, "Induction machine drive condition monitoring and diagnostic research - A survey," *Electr. Power Syst. Res.*, vol. 64, no. 2, pp. 145–158, 2003, doi: 10.1016/S0378-7796(02)00172-4.
- [22] P. Konar and P. Chattopadhyay, "Multi-class *Fault* diagnosis of induction motor using Hilbert and Wavelet Transform," *Appl. Soft Comput.*, vol. 30, pp. 341–352, 2015, doi: 10.1016/j.asoc.2014.11.062.
- [23] R. R. Kumar *et al.*, "Induction Machine Stator *Fault* Tracking Using the Growing Curvilinear Component Analysis," *IEEE Access*, vol. 9, pp. 2201–2212, 2021, doi: 10.1109/ACCESS.2020.3047202.
- [24] A. Glowacz, "Diagnostics of Rotor Damages of Three-Phase Induction Motors Using Acoustic Signals and SMOFS-20-EXPANDED," *Arch. Acoust.*, vol. 41, no. 3, pp. 507–515, 2016, doi: 10.1515/aoa-2016-0049.
- [25] X. Lou and K. A. Loparo, "*Bearing Fault* diagnosis based on wavelet transform and fuzzy inference," *Mech. Syst. Signal Process.*, vol. 18, no. 5, pp. 1077–1095, 2004, doi: 10.1016/S0888-3270(03)00077-3.
- [26] B. F. Hsu *et al.*, "Smart maintenance system for three-phase power transformer via fuzzy logic approach," *Int. J. Circuits, Syst. Signal Process.*, vol. 5, no. 4, pp. 370–381, 2011.
- [27] J. Sobral and C. Guedes Soares, "Preventive Maintenance of Critical Assets based on Degradation Mechanisms and Failure Forecast," *IFAC-PapersOnLine*, vol. 49, no. 28, pp. 97–102, 2016, doi: 10.1016/j.ifacol.2016.11.017.
- [28] H. Ahmadi, A. Moosavian, and M. Khazaei, "An appropriate approach for misalignment *Fault* diagnosis based on feature selection and least square support vector machine," *Int. J. Mech.*, vol. 6, no. 2, pp. 97–104, 2012.
- [29] B. B, A. H, and L. R, "Implementing discrete wavelet transform and artificial neural networks for acoustic condition monitoring of gearbox," *ElixirMech.Engg*, vol. 35, no. May 2011, pp. 2909–2911, 2011, [Online]. Available:
https://www.researchgate.net/profile/Behrad_Bagheri/publication/266287740_Implementing_discrete_wavelet_transform_and_artificial_neural_netw

- orks_for_acoustic_condition_monitoring_of_gearbox/links/542bf9130cf27e39fa91c54c/Implementing-discrete-wavelet-tran.
- [30] H. Ahmadi and A. Moosavian, “*Fault* diagnosis of journal-bearing of generator using power spectral density and *Fault* probability distribution function,” *Commun. Comput. Inf. Sci.*, vol. 241 CCIS, pp. 30–36, 2011, doi: 10.1007/978-3-642-27337-7_4.
- [31] P. Gangsar and R. Tiwari, “Comparative investigation of vibration and current monitoring for prediction of mechanical and electrical *Faults* in induction motor based on multiclass-support vector machine algorithms,” *Mech. Syst. Signal Process.*, vol. 94, pp. 464–481, 2017, doi: 10.1016/j.ymsp.2017.03.016.
- [32] B. P. Kamiel, N. Prastomo, and B. Riyanta, “Ekstraksi Parameter Statistik Domain Waktu dan Domain Frekuensi untuk Mendeteksi Kavitas pada Pompa Sentrifugal Berbasis Principal Component Analysis (PCA),” *J. Rekayasa Mesin*, vol. 10, no. 2, pp. 165–176, 2019, doi: 10.21776/ub.jrm.2019.010.02.8.
- [33] D. Anton Asfani, I. M. Yulistya Negara, and P. P. Surya, “Short Circuit Detection in Stator Winding Of Three Phase Induction Motor Using Wavelet Transform and Quadratic Discriminant Analysis,” pp. 361–366, 2015, doi: 10.12792/icisip2015.068.
- [34] A. Da Silva, “Induction motor *Fault* diagnostic and monitoring methods,” no. May, pp. 1–159, 2006, [Online]. Available: [http://www.eng.mu.edu/demerdashn/Bios/Aderiano da Silva/MS Thesis \(Aderiano da Silva\).pdf](http://www.eng.mu.edu/demerdashn/Bios/Aderiano_da_Silva/MS_Thesis_(Aderiano_da_Silva).pdf).
- [35] S. Karmakar, S. Chattopadhyay, M. Mitra, and S. Sengupta, *Induction Motor Fault Diagnosis*. 2016.
- [36] Ribeirorocho, “Kumparan Motor Listrik,” 2018. <https://www.istockphoto.com/id/foto/kumparan-motor-listrik-gm1061795992-283855023>.
- [37] M. E. H. Benbouzid and G. B. Kliman, “What stator current processing-based technique to use for induction motor rotor *Faults* diagnosis?,” *IEEE Trans. Energy Convers.*, vol. 18, no. 2, pp. 238–244, 2003, doi:

- 10.1109/TEC.2003.811741.
- [38] S. Bin Lee, T. G. Habetler, R. G. Harley, and D. J. Gritter, "An evaluation of model-based stator resistance estimation for induction motor stator winding temperature monitoring," *Proc. IEEE Power Eng. Soc. Transm. Distrib. Conf.*, vol. 2, no. July 2015, p. 1233, 2002, doi: 10.1109/mper.2002.4311669.
- [39] A. Rakhman, "Prinsip Kerja Generator," 2023. .
- [40] I. Y. Önel and M. E. H. Benbouzid, "Induction motor *bearing* failure detection and diagnosis: Park and concordia transform approaches comparative study," *IEEE/ASME Trans. Mechatronics*, vol. 13, no. 2, pp. 257–262, 2008, doi: 10.1109/TMECH.2008.918535.
- [41] N. Tandon and A. Choudhury, "A theoretical model to predict the vibration response of rolling *bearings* in a rotor *bearing* system to distributed defects under radial load," *J. Tribol.*, vol. 122, no. 3, pp. 609–615, 2000, doi: 10.1115/1.555409.
- [42] Sukendi, I. Isranuri, and Suherman, "Analisa Karakteristik Getaran Dan *Machine learning* Untuk Deteksi Dini Kerusakan *Bearing*," *Widya Tek.*, vol. 23, no. 2, pp. 41–49, 2015.
- [43] J. Malta, B. I. Wahyudi, and M. Bur, "Analisis Getaran Bantalan Rotor Skala Laboratorium untuk Kondisi Lingkungan Normal dan Berdebu," *Teknika*, vol. 21, no. 3, pp. 36–49, 2014.
- [44] D. Leggate, J. Pankau, D. W. Schlegel, R. J. Kerkman, and G. L. Skibinski, "Reflected waves and their associated current," *IEEE Trans. Ind. Appl.*, vol. 35, no. 6, p. 13831392, 1999, doi: 10.1109/ias.1998.732416.
- [45] A. Glowacz, "Acoustic-based *Fault* diagnosis of commutator motor," *Electron.*, vol. 7, no. 11, 2018, doi: 10.3390/electronics7110299.
- [46] P. A. Delgado-Arredondo, D. Morinigo-Sotelo, R. A. Osornio-Rios, J. G. Avina-Cervantes, H. Rostro-Gonzalez, and R. de J. Romero-Troncoso, "Methodology for *Fault* detection in induction motors via sound and vibration signals," *Mech. Syst. Signal Process.*, vol. 83, pp. 568–589, 2017, doi: 10.1016/j.ymsp.2016.06.032.
- [47] M. Varanis, A. L. Silva, P. H. A. Brunetto, and R. F. Gregolin, "Instrumentation for mechanical vibrations analysis in the time domain and

- frequency domain using the Arduino platform,” *Rev. Bras. Ensino Fis.*, vol. 38, no. 1, pp. 1–10, 2016, doi: 10.1590/S1806-11173812063.
- [48] T. Harčarik, J. Bocko, and K. MaslÁková, “Frequency analysis of acoustic signal using the Fast Fourier Transformation in MATLAB,” *Procedia Eng.*, vol. 48, pp. 199–204, 2012, doi: 10.1016/j.proeng.2012.09.505.
- [49] V. Pandiyan, R. Drissi-Daoudi, S. Shevchik, G. Masinelli, R. Logé, and K. Wasmer, “Analysis of time, frequency and time-frequency domain features from acoustic emissions during Laser Powder-Bed fusion process,” *Procedia CIRP*, vol. 94, no. March, pp. 392–397, 2020, doi: 10.1016/j.procir.2020.09.152.
- [50] D. Zhen, T. Wang, F. Gu, and A. D. Ball, “Fault diagnosis of motor drives using stator current signal analysis based on dynamic time warping,” *Mech. Syst. Signal Process.*, vol. 34, no. 1–2, pp. 191–202, 2013, doi: 10.1016/j.ymsp.2012.07.018.
- [51] N. B. Guo, Peng, “Wind Turbine Gearbox Condition Monitoring with AAKR and Moving Window Static Methods,” *Energies*, vol. 4.11, pp. 2077–2093, 2011.
- [52] B. Wu, M. Zhou, X. Shen, Y. Gao, R. Silvera, and G. Yiu, “Simple profile rectifications go a long way statistically exploring and alleviating the effects of *sampling* errors for program optimizations,” *Lect. Notes Comput. Sci. (including Subser. Lect. Notes Artif. Intell. Lect. Notes Bioinformatics)*, vol. 7920 LNCS, no. 97, pp. 654–678, 2013, doi: 10.1007/978-3-642-39038-8_27.
- [53] K. Kira and L. A. Rendell, “A Practical Approach to Feature Selection,” *Proc. 9th Int. Work. Mach. Learn. ICML 1992*, pp. 249–256, 1992, doi: 10.1016/B978-1-55860-247-2.50037-1.
- [54] M. ROBNIK SIKONJA MarkoRobnik and friuni-ljsi IGOR KONONENKO IgorKononenko, “Theoretical and Empirical Analysis of ReliefF and RReliefF,” *Mach. Learn.*, vol. 53, pp. 23–69, 2003, [Online]. Available: <http://lkm.fri.uni-lj.si/xaigor/slo/clanki/MLJ2003-FinalPaper.pdf>.
- [55] T. T. Le, R. J. Urbanowicz, J. H. Moore, and B. A. McKinney, “Statistical Inference Relief (STIR) feature selection,” *Bioinformatics*, vol. 35, no. 8, pp.

- 1358–1365, 2019, doi: 10.1093/bioinformatics/bty788.
- [56] S. Chikhi and S. Benhammada, “ReliefMSS: A variation on a feature ranking ReliefF algorithm,” *Int. J. Bus. Intell. Data Min.*, vol. 4, no. 3–4, pp. 375–390, 2009, doi: 10.1504/IJBIDM.2009.029085.
- [57] R. J. Urbanowicz, M. Meeker, W. La Cava, R. S. Olson, and J. H. Moore, “Relief-based feature selection: Introduction and review,” *J. Biomed. Inform.*, vol. 85, no. January, pp. 189–203, 2018, doi: 10.1016/j.jbi.2018.07.014.
- [58] I. Kononenko, “An adaptation of Relief for attribute estimation in regression,” *Proc. Fourteenth Int. Conf. Mach. Learn.*, vol. 5, 1993.
- [59] K. S. Kim, H. H. Choi, C. S. Moon, and C. W. Mun, “Comparison of k-nearest neighbor, quadratic discriminant and linear discriminant analysis in classification of electromyogram signals based on the wrist-motion directions,” *Curr. Appl. Phys.*, vol. 11, no. 3, pp. 740–745, 2011, doi: 10.1016/j.cap.2010.11.051.
- [60] U. Grouven, F. Bergel, and A. Schultz, “Implementation of linear and quadratic discriminant analysis incorporating costs of misclassification,” *Comput. Methods Programs Biomed.*, vol. 49, no. 1, pp. 55–60, 1996, doi: 10.1016/0169-2607(95)01705-4.
- [61] Muhammad Azharuddin Asyrofi, “Deteksi Kerusakan Motor Induksi Berbasis Variation Mode Decomposition dan Support Vector Machine,” Universitas Sebelas Maret, 2023.