

DAFTAR PUSTAKA

- Ahmed, Z., Mohamed, K., Zeeshan, S., & Dong, X. Q., 2020, Artificial intelligence with multi-functional machine learning platform development for better healthcare and precision medicine. In Database (Vol. 2020). Oxford University Press. <https://doi.org/10.1093/database/baaa010>
- Alam, A., 2023, *What is Machine Learning?* <https://doi.org/10.5281/zenodo.8231580>
- Anggraini, J., & Ardiani Puspa, M., 2008, *SUPERVISED AND UNSUPERVISED NEURAL NETWORKS TECHNIQUE IN FACIES CLASSIFICATION AND INTERPRETATION*.
- Anil, A. K. P., & Singh, U. K., 2023, An Optimal Solution to the Overfitting and Underfitting Problem of Healthcare Machine Learning Models. *Journal of Systems Engineering and Information Technology (JOSEIT)*, 2(2), 77–84. <https://doi.org/10.29207/joseit.v2i2.5460>
- Basyir, A., Bachtiar, A., & Haris, A., 2020, Total organic carbon prediction of well logs data: Case study Banuwati Shale Member Fm., Asri Basin, Indonesia, *AIP Conference Proceedings*, 2256. <https://doi.org/10.1063/5.0014651>
- Balan, B., Mohaghegh, S. and Ameri, S., 1995, State-of-Art in Permeability Determination from Well Log Data: Part 1-a Comprehensive Study, Model Development, SPE 30978.
- Bichri, H., Chergui, A., & Hain, M., 2024, Investigating the Impact of Train / Test Split Ratio on the Performance of Pre-Trained Models with Custom Datasets, In *IJACSA International Journal of Advanced Computer Science and Applications* (Vol. 15, Issue 2). www.ijacsa.thesai.org
- Bishop, M. G., 2001, *South Sumatra Basin Province, Indonesia: The Lahat/ Talang Akar Cenozoic Total Petroleum System*, USGS Open file report, 99-50-S.
- Bhatt, A. and Helle, H. B., 2002, Determination of facies from well logs using modular neural networks, *Petroleum Geoscience*, 8, 217-228.
- Boyd, A., Darling, H., Tabanou, J., Davis, B., Lyon B., Flaum, C., Klien, J., Sneider, R.M., Sibbit, A., Singer, J., 1995, *The Lowdown on Low-Resistivity Pay*. Schlumberger Oil Field Review, Halaman 4 –18.
- Chala, A. T., & Ray, R., 2023, Assessing the Performance of Machine Learning Algorithms for Soil Classification Using Cone Penetration Test Data, *Applied Sciences (Switzerland)*, 13(9). <https://doi.org/10.3390/app13095758>
- Dananjaya, R. H., Sutrisno, S., & Fitriady, S., 2022, PENERAPAN ARTIFICIAL NEURAL NETWORK (ANN) DALAM MEMREDIKSI KAPASITAS

DUKUNG FONDASI TIANG, *Matriks Teknik Sipil*, 10(4), 419.
<https://doi.org/10.20961/mateksi.v10i4.65034>

De Coster, G. L., 1974, *The Geology of the Central and South Sumatra Basins*, Proceedings Indonesian Petroleum Association, 16th Annual Convention & Exhibition, Jakarta, 399-428.

Ellis, D. V. ., & Singer, J. M., 2010, *Well logging for earth scientists*, Springer.

Farizi, F., Kurniawan Hidayat, H., Siswikirana, R., Santoso, A., Yudhi Purwanto, E., & Masitah, S., 2018, *INTEGRATED FLUID INTERPRETATION METHODOLOGY WITH NEW DEVELOPED TECHNIQUES THAT REVEALS HIDDEN POTENTIALS IN MATURE GIANT TUNU FIELD*.

Field, L., & Ahmed Meneassy, O., 2024, Application of Gas Ratio Analysis in Reservoir Evaluation-Case Study in Burhan, www.globalscientificjournal.com

Géron, A., 2017, *Hands-On Machine Learning with Scikit-Learn & Tensorflow* (pp. 1005, 564). O'Reilly Media, Inc.

Ghaniputra, S., Mukmin, H., & Hidayat, H. K., 2018, *DYNAMIC BASELINE ON CHROMATOGRAPHIC GAS RATIOS ANALYSIS: A NEW PRACTICAL APPROACH FOR FLUID CHARACTERIZATION AND ENHANCED FLUID INTERPRETATION IN BEKAPAI FIELD*.

Ginger, D. dan Fielding, K., 2005, *The Petroleum Systems and Future Potential of the South Sumatra basin*, Proceedings 30th Annual Convention Indonesian Petroleum Association, 67- 89.

Glover, P. W. J., 2000, *Petrophysics, Department of Geology and Petroleum Geology, Univerisity of Aberdeen, United Kingdom*.

Ghneej, A. A., Dashti, J., Khan, B., Ammar, H., Al-Nabhan, A., Singh, S. K., Al Adwani, T., & Marai, N., 2013, *Fluid Detection in Carbonate Reservoirs utilizing Gas Analysis-A Case Study*.

Hamilton, W., 1979, *Tectonics of the Indonesian Region*, USGS Professional Paper 1078, United States Government Printing Office, Washinton.

Harsono, A., 1997, *Evaluasi Formasi dan Aplikasi Log*, Schlumberger Oilfield Services, Jakarta.

Harworth, J.H., Sellens, M.P. and Gurvis, R.L., 1984, Reservoir Characterization by Analysis of Light Hydrocarbon Shows. Society of Petroleum Engineers (SPE 12914) Conference, p.35.

Harworth, J.H., Sellens, M.P. and Whittaker, A., 1985, Interpretation of Hydrocarbon Show using light (C1-C5) Hydrocarbon Gases from Mudlog Data, Amer. Assoc. Petrol. Geol., v.69, no.8, pp. 95 105.

- Hidayat, H., Supriady, S., Anwar, T., Ariestya, G., Giriansyah, B., & Mahakam, P. H., 2019, *SPE-196496-MS Revealing Hidden Potentials to Maintain Production by Using Integrated Petrophysical Interpretation Techniques in Mahakam Mature Fields*.
- Hutchinson, C. S., 1996, *South-East Asian Oil, Gas, Coal and Mineral Deposits*, Clarendon Press Oxford, United Kingdom.
- Krygowski, D. Asquith, G.B., dan Gibson, C. R., 2004, *Basic Well Log Analysis, 2nd Edition*, AAPG Methods in Exploration Series, No.16. Tulsa, Oklahoma.
- Lisovskaya, E. A., & Platov, B. v., 2021, Application of neural network technology to calculate well logging porosity on the example of UK2-7 formations in the Yelizarovsky deflection (Western Siberia), *E3S Web of Conferences*, 266. <https://doi.org/10.1051/e3sconf/202126607005>
- Mode, A. W., Anyiam, O. A., & Egbujie, B. C., 2014, The application of chromatographic gas ratio analysis in reservoir fluid evaluation of "Beta" field in the Congo basin, *Journal of the Geological Society of India*, 84(3), 303–310. <https://doi.org/10.1007/s12594-014-0133-z>
- Mohseni, H., Esfandyari, M., & Asl, H., 2015, Application of artificial neural networks for prediction of Sarvak Formation lithofacies based on well log data, Marun oil field, SW Iran, In *Geopersia* (Vol. 5, Issue 2).
- Molina, E., & Parraga-Alava, J., 2024, Artificial Neural Networks for Classification Tasks: A Systematic Literature Review. *Enfoque UTE*, 15(4), 1–10. <https://doi.org/10.29019/enfoqueute.1058>
- Mondol, N. H., 2015, Well logging: Principles, applications and uncertainties. In *Petroleum Geoscience: From Sedimentary Environments to Rock Physics, Second Edition* (pp. 385–425), Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-34132-8_16
- Müller, A.C. and Guido, S., 2016, *Introduction to Machine Learning with Python: A Guide for Data Scientists*, Sebastopol, CA: O'Reilly Media.
- Nurhalizah, R. S., Ardianto, R., & Purwono, P., 2024, Analisis Supervised dan Unsupervised Learning pada Machine Learning: Systematic Literature Review, *Jurnal Ilmu Komputer Dan Informatika*, 4(1), 61–72.
- Oye, E., Frank, E., & Owen, J., 2024, *Unsupervised and Supervised Models in Machine Learning Unsupervised vs. Supervised Learning*. <https://www.researchgate.net/publication/387136555>
- Paneiro, G., & Rafael, M., 2021, Artificial neural network with a cross-validation approach to blast-induced ground vibration propagation modeling. *Underground Space (China)*, 6(3), 281–289. <https://doi.org/10.1016/j.undsp.2020.03.002>

- Panggabean, H., Lauti Dwita Santy, dan, Survei Geologi, P., & Geologi Jl Diponegoro, B., 2012, Geo-Resources Sejarah Penimbunan Cekungan Sumatra Selatan dan Implikasinya terhadap Waktu Generasi Hidrokarbon Burial History of the South Sumatra Basins and its Implication to the Time of the hydrocarbon potential, In *JSD.Geol* (Vol. 22, Issue 4).
- Park, H., Kwon, H., Cho, H., & Kim, J., 2022, A framework for energy optimization of distillation process using machine learning-based predictive model, *Energy Science and Engineering*, 10(6), 1913–1924. <https://doi.org/10.1002/ese3.1134>
- Peng, J., Jury, E. C., Dönnnes, P., & Ciurtin, C, 2021, Machine Learning Techniques for Personalised Medicine Approaches in Immune-Mediated Chronic Inflammatory Diseases: Applications and Challenges. In *Frontiers in Pharmacology* (Vol. 12), Frontiers Media S.A. <https://doi.org/10.3389/fphar.2021.720694>
- Pertamina, 2025. *Laporan OPL Phase 3 TRM Subsurface Lapangan Gunung Kemala*. (Tidak dipublikasikan).
- Pertamina Hulu Mahakam, 2025. *Mahakam Integrated Fluid Interpretation Methods & Application*. (Tidak dipublikasikan).
- Rainio, O., Teuho, J., & Klén, R, 2024, Evaluation metrics and statistical tests for machine learning. *Scientific Reports*, 14(1). <https://doi.org/10.1038/s41598-024-56706-x>
- Rider, M., 2002, *The Geological Interpretation of Well Log, 2nd Edition*, Whittles Publishing, Scotland.
- Sarker, I. H., 2021, Machine Learning: Algorithms, Real-World Applications and Research Directions, In *SN Computer Science* (Vol. 2, Issue 3), Springer. <https://doi.org/10.1007/s42979-021-00592-x>
- Sathyanarayanan, S. and Tantri, B.R., 2024, Confusion Matrix-Based Performance Evaluation Metrics. *African Journal of Biomedical Research*, 27, 4023-4031. <https://doi.org/10.53555/ajbr.v27i4s.4345>
- Shier, D.E., 2004, Well log normalization: methods and guidelines, *Petrophysics*, 45(3), pp.268–280, Paper Number: SPWLA-2004-v45n3a4.
- Sircar, A., Yadav, K., Rayavarapu, K., Bist, N., & Oza, H., 2021, Application of machine learning and artificial intelligence in oil and gas industry, *Petroleum Research*, 6(4), 379-391.
- Sugiyono, P., 2010, Metodologi penelitian kuantitatif kualitatif dan R&D. *Alpabet*, Bandung.
- Tamtomo, Budi, Yuswar, Irzan, Widiyanto, dan Eko, 1997, *Transgressive Talang Akar Sands of the Duang Area, South Sumatra Basin: Origin Distribution and Implication for Exploration Play Concept*, Proceedings of the

Petroleum Systems of Sea Asia and Australia: Indonesian Petroleum Association Conference, May 1997, 699-708.

- Victor Contreras, J., & Baker Hughes, P., 2020, Supervised Learning Applied to Rock Type Classification in Sandstone Based on Wireline Formation Pressure Data AAPG Boosting Reserves and Recovery Using Machine Learning and Analytics.
- Wang, X., Liu, Y., & Xin, H., 2021, Bond strength prediction of concrete-encased steel structures using hybrid machine learning method, *Structures*, 32, 2279–2292. <https://doi.org/10.1016/j.istruc.2021.04.018>
- Yan, P., Kou, X., Hu, G., Yin, Q., Zhang, L., Wang, W., & Lai, F., 2021, Integrated Petrophysical Evaluation of Shale Gas Reservoirs for Wufeng-Longmaxi Formation in Southeast Chongqing, *IOP Conference Series: Earth and Environmental Science*, 804(2). <https://doi.org/10.1088/1755-1315/804/2/022019>
- Yu, L., Lai, K.K., & Wang, S., 2007, Data preparation in neural network data analysis, In *International Series in Operations Research and Management Science* (Vol. 107, pp. 39–62), Springer New York LLC. https://doi.org/10.1007/978-0-387-71720-3_3
- Zhang, G. P., 2000, Neural networks for classification: A survey. *IEEE Transactions on Systems, Man and Cybernetics Part C: Applications and Reviews*, 30(4), 451–462. <https://doi.org/10.1109/5326.897072>