

## DAFTAR PUSTAKA

- Afianah, N., Putra, A.E. & Dharmawan, A., 2019, High-Level Synthesize of Backpropagation Artificial Neural Network Algorithm on the FPGA, Dalam, *2019 5th International Conference on Science and Technology (ICST)*, IEEE, hlm. 1–5.,
- Akhoondzadeh, M. & Jahani Chehrebargh, F., 2016, Feasibility of anomaly occurrence in aerosols time series obtained from MODIS satellite images during hazardous earthquakes, *Advances in Space Research*, 58, 6, 890–896.
- Arifoglu, D. & Bouchachia, A., 2017, Activity Recognition and Abnormal Behaviour Detection with Recurrent Neural Networks, *Procedia Computer Science*, 110, 86–93.
- Ariyanto, T., Yuniyanto, E. & Taryadi, T., 2021, Identifikasi Tingkat Pengangguran Terbuka Berdasarkan Kecamatan Di Kabupaten Pekalongan Menggunakan Spatial Model, *Jurnal ELTIKOM*, 5, 2, 65–72.
- Asencio–Cortés, G., Morales–Esteban, A., Shang, X. & Martínez–Álvarez, F., 2018, Earthquake prediction in California using regression algorithms and cloud-based big data infrastructure, *Computers & Geosciences*, 115, 198–210.
- Asencio–Cortés, G., Scitovski, S., Scitovski, R. & Martínez–Álvarez, F., 2017, Temporal analysis of croatian seismogenic zones to improve earthquake magnitude prediction, *Earth Science Informatics*, 10, 3, 303–320.
- Asencio-Cortés, G., Martínez-Álvarez, F., Troncoso, A. & Morales-Esteban, A., 2015, Medium–large earthquake magnitude prediction in Tokyo with artificial neural networks, *Neural Computing and Applications*, 28, 5, 1043–1055.
- Asencio-Cortés, G., Martínez-Álvarez, F., Morales-Esteban, A. & Reyes, J., 2016, A sensitivity study of seismicity indicators in supervised learning to improve earthquake prediction, *Knowledge-Based Systems*, 101, 15–30.
- Asencio-Cortés, G, Martínez-Álvarez, F., Morales-Esteban, A., Reyes, J. & Troncoso, A., 2015, Improving Earthquake Prediction with Principal Component Analysis: Application to Chile, Dalam, hlm. 393–404.,
- Asfuroğlu, Z.M., 2023, First 10 days after the 6th of February 2023 earthquake disaster: experience of an orthopedic clinic on the border of the disaster zone, *Turkish Journal of Trauma and Emergency Surgery*, 1191–1198.
- Asim, K.M., Martínez-Álvarez, F., Basit, A. & Iqbal, T., 2017, Earthquake magnitude prediction in Hindukush region using machine learning techniques, *Natural Hazards*, 85, 1, 471–486.
- Asim, K.M., Idris, A., Martinez-Alvarez, F. & Iqbal, T., 2016, Short Term Earthquake Prediction in Hindukush Region Using Tree Based Ensemble Learning, Dalam, *2016 International Conference on Frontiers of Information Technology (FIT)*, IEEE, hlm. 365–370.,
- Asim, K.M., Idris, A., Iqbal, T. & Martínez-Álvarez, F., 2018a, Earthquake prediction model using support vector regressor and hybrid neural networks, *PLOS ONE*, 13, 7, e0199004.

- Asim, K.M., Idris, A., Iqbal, T. & Martínez-Álvarez, F., 2018b, Seismic indicators based earthquake predictor system using Genetic Programming and AdaBoost classification, *Soil Dynamics and Earthquake Engineering*, 111, 1–7.
- Asim, K.M., Moustafa, S.SR., Niaz, I.A., Elawadi, E.A., Iqbal, T. & Martínez-Álvarez, F., 2020, Seismicity analysis and machine learning models for short-term low magnitude seismic activity predictions in Cyprus, *Soil Dynamics and Earthquake Engineering*, 130, 105932.
- Banna, Md.H. Al, Ghosh, T., Nahian, Md.J. Al, Taher, K.A., Kaiser, M.S., Mahmud, M., Hossain, M.S. & Andersson, K., 2021, Attention-Based Bi-Directional Long-Short Term Memory Network for Earthquake Prediction, *IEEE Access*, 9, 56589–56603.
- Banna, Md.H. Al, Taher, K.A., Kaiser, M.S., Mahmud, M., Rahman, Md.S., Hosen, A.S.M.S. & Cho, G.H., 2020, Application of Artificial Intelligence in Predicting Earthquakes: State-of-the-Art and Future Challenges, *IEEE Access*, 8, 192880–192923.
- Baranyai, D. & Sipos, T., 2022, Black-Spot Analysis in Hungary Based on Kernel Density Estimation, *Sustainability*, 14, 14, 8335.
- Berhich, A., Belouadha, F.-Z. & Kabbaj, M.I., 2022, A location-dependent earthquake prediction using recurrent neural network algorithms, *Soil Dynamics and Earthquake Engineering*, 161, 107389.
- Berhich, A., Belouadha, F.-Z. & Kabbaj, M.I., 2023, An attention-based LSTM network for large earthquake prediction, *Soil Dynamics and Earthquake Engineering*, 165, 107663.
- Berhich, A., Belouadha, F.Z. & Kabbaj, M.I., 2021, LSTM-based earthquake prediction: enhanced time feature and data representation, *International Journal of High Performance Systems Architecture*, 10, 1, 1.
- Bhandarkar, T., K, V., Satish, N., Sridhar, S., Sivakumar, R. & Ghosh, S., 2019, Earthquake trend prediction using long short-term memory RNN, *International Journal of Electrical and Computer Engineering (IJECE)*, 9, 2, 1304.
- Bilal, M.A., Ji, Y., Wang, Y., Akhter, M.P. & Yaqub, M., 2022a, An Early Warning System for Earthquake Prediction from Seismic Data Using Batch Normalized Graph Convolutional Neural Network with Attention Mechanism (BNGCNNATT), *Sensors*, 22, 17.
- Bilal, M.A., Ji, Y., Wang, Y., Akhter, M.P. & Yaqub, M., 2022b, Early Earthquake Detection Using Batch Normalization Graph Convolutional Neural Network (BNGCNN), *Applied Sciences*, 12, 15, 7548.
- Boucouvalas, A.C., Gkasios, M., Tselikas, N.T. & Drakatos, G., 2015, Modified-Fibonacci-Dual-Lucas method for earthquake prediction, Dalam, D. G. Hadjimitsis dkk., ed. hlm. 95351A.,
- Brownlee, J., 2016, *Machine Learning Mastery with Python: Understand Your Data, Create Accurate Models, and Work Projects End-to-End*, Machine Learning Mastery, San Francisco.
- Buskirk, R.E., Frohlich, C. & Latham, G. V., 1981, Unusual animal behavior before earthquakes: A review of possible sensory mechanisms, *Reviews of Geophysics*, 19, 2, 247.

- Chan, J.Y.-L., Leow, S.M.H., Bea, K.T., Cheng, W.K., Phoong, S.W., Hong, Z.-W. & Chen, Y.-L., 2022, Mitigating the Multicollinearity Problem and Its Machine Learning Approach: A Review, *Mathematics*, 10, 8, 1283.
- Chrisantoni, C., Priyambodo, T.K., Raswa, F.H. & Wang, ia-C., 2021, Partial Fingerprint on Combined Evaluation using Deep Learning and Feature Descriptor, Dalam, *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, IEEE, Tokyo, Japan, hlm. 1611–1614.,
- Dong, Y. & Zhuang, Y., 2024, How does single- or double-cropped rice policy influence spatially irrigated land value in China?, *Agricultural Economics (Zemědělská ekonomika)*, 70, 6, 279–290.
- Doshi-Velez, F. & Kim, B., 2017, Towards A Rigorous Science of Interpretable Machine Learning, <https://arxiv.org/abs/1702.08608>,.
- Ernandi, F.N. & Madlazim, M., 2020, ANALISIS VARIASI a-VALUE DAN b-VALUE DENGAN MENGGUNAKAN SOFTWARE ZMAP V.6 SEBAGAI INDIKATOR POTENSI GEMPA BUMI DI WILAYAH NUSA TENGGARA BARAT, *Inovasi Fisika Indonesia*, 9, 3, 24–30.
- Essing, D. & Poli, P., 2022, Spatiotemporal Evolution of the Seismicity in the Alto Tiberina Fault System Revealed by a High-Resolution Template Matching Catalog, *Journal of Geophysical Research: Solid Earth*, 127, 10.
- Fabregas, A.C., Arellano, P.B. V. & Pinili, A.N.D., 2020, Long-Short Term Memory (LSTM) Networks with Time Series and Spatio-Temporal Approaches Applied in Forecasting Earthquakes in the Philippines, Dalam, *Proceedings of the 4th International Conference on Natural Language Processing and Information Retrieval*, ACM, New York, NY, USA, hlm. 188–193.,
- Fernández-Gómez, M., Asencio-Cortés, G., Troncoso, A. & Martínez-Álvarez, F., 2017, Large Earthquake Magnitude Prediction in Chile with Imbalanced Classifiers and Ensemble Learning, *Applied Sciences*, 7, 6, 625.
- Fotheringham, A.S., Brunson, C. & Charlton, M., 2000, *Quantitative geography: Perspectives on spatial data analysis*, Sage.
- Fuentes, A.G., Nicolis, O., Peralta, B. & Chiodi, M., 2022, Spatio-Temporal Seismicity Prediction in Chile Using a Multi-Column ConvLSTM, *IEEE Access*, 10, 107402–107415.
- Gao, Y., Cheng, J., Meng, H. & Liu, Y., 2019, Measuring spatio-temporal autocorrelation in time series data of collective human mobility, *Geo-spatial Information Science*, 22, 3, 166–173.
- Gedamu, W.T., Plank-Wiedenbeck, U. & Wodajo, B.T., 2024, A spatial autocorrelation analysis of road traffic crash by severity using Moran's I spatial statistics: A comparative study of Addis Ababa and Berlin cities, *Accident Analysis & Prevention*, 200, 107535.
- Getis, A. & Ord, J.K., 1992, The Analysis of Spatial Association by Use of Distance Statistics, *Geographical Analysis*, 24, 3, 189–206.
- Goodfellow, I., Bengio, Y., Courville, A. & Bengio, Y., 2016, *Deep learning*, MIT press Cambridge.

- Gu, H., Wang, Y., Hong, S. & Gui, G., 2019, Blind Channel Identification Aided Generalized Automatic Modulation Recognition Based on Deep Learning, *IEEE Access*, 7, 110722–110729.
- Gutenberg, B. & Richter, C.F., 1944, Frequency of earthquakes in California\*, *Bulletin of the Seismological Society of America*, 34, 4, 185–188.
- Hajikhodaverdikhan, P., Nazari, M., Mohsenizadeh, M., Shamshirband, S. & Chau, K., 2018, Earthquake prediction with meteorological data by particle filter-based support vector regression, *Engineering Applications of Computational Fluid Mechanics*, 12, 1, 679–688.
- Hakkoum, H., Idri, A. & Abnane, I., 2024, Global and local interpretability techniques of supervised machine learning black box models for numerical medical data, *Engineering Applications of Artificial Intelligence*, 131, 107829.
- Hancock, J.T. & Khoshgoftaar, T.M., 2020, CatBoost for big data: an interdisciplinary review, *Journal of Big Data*, 7, 1, 94.
- Hart, T. & Zandbergen, P., 2014, Kernel density estimation and hotspot mapping: Examining the influence of interpolation method, grid cell size, and bandwidth on crime forecasting, *Policing*, 37, 2, 305–323.
- Hasan Al Banna, Md., Ghosh, T., Taher, K.A., Kaiser, M.S. & Mahmud, M., 2021, An Earthquake Prediction System for Bangladesh Using Deep Long Short-Term Memory Architecture, Dalam, hlm. 465–476.,
- Hashimoto, S., Yoshiki, S., Saeki, R., Mimura, Y., Ando, R. & Nanba, S., 2016, Development and application of traffic accident density estimation models using kernel density estimation, *Journal of Traffic and Transportation Engineering (English Edition)*, 3, 3, 262–270.
- Hayakawa, M., 2016, Earthquake prediction with electromagnetic phenomena, *AIP Conference Proceedings*, 1709, 1, 020002. <https://aip.scitation.org/doi/abs/10.1063/1.4941201>, diakses 10 Desember 2022.
- Hoerl, A.E. & Kennard, R.W., 2000, Ridge Regression: Biased Estimation for Nonorthogonal Problems, *Technometrics*, 42, 1, 80.
- Hutchings, S.J. & Mooney, W.D., 2021, The Seismicity of Indonesia and Tectonic Implications, *Geochemistry, Geophysics, Geosystems*, 22, 9.
- Intan, N. & Zuraya, N., 2021, Kemenkeu: Kerugian Akibat Bencana Rp 22,85 Triliun per Tahun | *Republika Online*, <https://www.republika.co.id/berita/quvink383/kemenkeu-kerugian-akibat-bencana-rp-2285-triliun-per-tahun>, diakses 12 Desember 2022.
- Kail, R., Burnaev, E. & Zaytsev, A., 2022, Recurrent Convolutional Neural Networks Help to Predict Location of Earthquakes, *IEEE Geoscience and Remote Sensing Letters*, 19, 1–5.
- KANAMORI, H., 2004, The diversity of the physics of earthquakes, *Proceedings of the Japan Academy, Series B*, 80, 7, 297–316.
- Kanamori, H. & Brodsky, E.E., 2004, The physics of earthquakes, *Reports on Progress in Physics*, 67, 8, 1429–1496.
- Kannan, S., 2014, Innovative Mathematical Model for Earthquake Prediction, *Engineering Failure Analysis*, 41, 89–95.

- Kaufman, S., Rosset, S., Perlich, C. & Stitelman, O., 2012, Leakage in data mining, *ACM Transactions on Knowledge Discovery from Data*, 6, 4, 1–21.
- Kavianpour, P., Kavianpour, M., Jahani, E. & Ramezani, A., 2024, A CNN-BiLSTM model with attention mechanism for earthquake prediction, *The Journal of Supercomputing*, 80, 2, 2913–2913.
- Kavianpour, P., Kavianpour, M., Jahani, E. & Ramezani, A., 2021, Earthquake Magnitude Prediction using Spatia-Temporal Features Learning Based on Hybrid CNN-BiLSTM Model, Dalam, *Proceedings - 2021 7th International Conference on Signal Processing and Intelligent Systems, ICSPIS 2021*, Institute of Electrical and Electronics Engineers Inc.,
- Kolluri, J., Kotte, V.K., Phridviraj, M.S.B. & Razia, S., 2020, Reducing Overfitting Problem in Machine Learning Using Novel L1/4 Regularization Method, Dalam, *2020 4th International Conference on Trends in Electronics and Informatics (ICOEI)(48184)*, IEEE, hlm. 934–938.,
- Korepanov, V., 2016, Possibility to detect earthquake precursors using cubesats, *Acta Astronautica*, 128, 203–209.
- Lee, J. & Wong, D.W.S., 2001, *Statistical Analysis with ArcView GIS*, John Wiley & Sons, New York.
- Linardatos, P., Papastefanopoulos, V. & Kotsiantis, S., 2020, Explainable AI: A Review of Machine Learning Interpretability Methods, *Entropy*, 23, 1, 18.
- Liu, B., Wen, H., Di, M., Huang, J., Liao, M., Yu, J. & Xiang, Y., 2025, Mapping and interpretability of aftershock hazards using hybrid machine learning algorithms, *Journal of Rock Mechanics and Geotechnical Engineering*, 17, 8, 4908–4932.
- Liu, T., Fang, S., Zhao, Y., Wang, P. & Zhang, J., 2015, Implementation of Training Convolutional Neural Networks, *Computer Vision and Pattern Recognition*.
- Madlazim, M., 2013, Kajian Awal Tentang b Value Gempa Bumi di Sumatra, *Jurnal Penelitian Fisika dan Aplikasinya (JPFA)*, 3, 1, 41.
- Maharani, E., 2023, Infografis Kerusakan Ekonomi Akibat Gempa Besar di Dunia, *Republika*. <https://visual.republika.co.id/berita/rrsyo1335/infografis-kerusakan-ekonomi-akibat-gempa-besar-di-dunia>, diakses 1 Oktober 2023.
- Mailanda, R., Kusnandar, D. & Miftahul Huda, ainul, 2022, *ANALISIS AUTOKORELASI SPASIAL KASUS POSITIF COVID-19 MENGGUNAKAN INDEKS MORAN DAN LISA*,
- Majhi, S.K., Hossain, S.S. & Padhi, T., 2020, MFOFLANN: moth flame optimized functional link artificial neural network for prediction of earthquake magnitude, *Evolving Systems*, 11, 1, 45–63. <https://link.springer.com/article/10.1007/s12530-019-09293-6>, diakses 13 November 2022.
- Martínez-Álvarez, F., Reyes, J., Morales-Esteban, A. & Rubio-Escudero, C., 2013, Determining the best set of seismicity indicators to predict earthquakes. Two case studies: Chile and the Iberian Peninsula, *Knowledge-Based Systems*, 50, 198–210.
- Mavrouli, M., Mavroulis, S., Lekkas, E. & Tsakris, A., 2023, The Impact of Earthquakes on Public Health: A Narrative Review of Infectious Diseases in

- the Post-Disaster Period Aiming to Disaster Risk Reduction, *Microorganisms*, 11, 2, 419.
- McBrearty, I.W. & Beroza, G.C., 2025, Double difference earthquake location with graph neural networks, *Earth, Planets and Space*, 77, 1, 127.
- McCaffrey, R., 2009, The Tectonic Framework of the Sumatran Subduction Zone, *Annual Review of Earth and Planetary Sciences*, 37, 1, 345–366.
- Mejia, J., Rojas, K., Valeza, N. & Villagrancia, A.R., 2014, Earthquake Prediction through Kannan-Mathematical-Model Analysis and Dobrovolsky-Based Clustering Technique, *DLSU Research Congress*. [https://www.researchgate.net/publication/293330773\\_Earthquake\\_Prediction\\_through\\_Kannan-Mathematical-Model\\_Analysis\\_and\\_Dobrovolsky-Based\\_Clustering\\_Technique](https://www.researchgate.net/publication/293330773_Earthquake_Prediction_through_Kannan-Mathematical-Model_Analysis_and_Dobrovolsky-Based_Clustering_Technique), diakses 8 Desember 2022.
- Miller, T., 2019, Explanation in artificial intelligence: Insights from the social sciences, *Artificial Intelligence*, 267, 1–38.
- Mohd Sairi, N.A., Burhan, B. & Mohd Safian, E.E., 2020, Identifying the spatial patterns of housing distribution in Johor Bahru through spatial autocorrelation, *IOP Conference Series: Earth and Environmental Science*, 540, 1, 012008.
- Mousavi, S.M., Zhu, W., Sheng, Y. & Beroza, G.C., 2019, CRED: A Deep Residual Network of Convolutional and Recurrent Units for Earthquake Signal Detection, *Scientific Reports*, 9, 1, 10267.
- Mousavi, S.M., Sheng, Y., Zhu, W. & Gregory C, B., 2019, STanford EArthquake Dataset (STEAD): A Global Data Set of Seismic Signals for AI, *IEEE Access*, 7, 179464–179476.
- Naimi-Ghassabian, N., Khatib, M.-M., Nazari, H. & Heyhat, M.-R., 2018, Regional variations and earthquake frequency–magnitude distribution and fractal dimension in the North of Central-East Iran Blocks (NCEIB), *Arabian Journal of Geosciences*, 11, 11, 257.
- Olah, C., 2015, Understanding LSTM Networks, <https://colah.github.io/posts/2015-08-Understanding-LSTMs/>.
- Openshaw, S., 1984, *The modifiable areal unit problem*,
- Osadebey, M., Pedersen, M., Arnold, D. & Wendel-Mitoraj, K., 2019, Local Indicators of Spatial Autocorrelation (LISA): Application to Blind Noise-Based Perceptual Quality Metric Index for Magnetic Resonance Images, *Journal of Imaging*, 5, 1, 20.
- Pan, S.J. & Yang, Q., 2010, A Survey on Transfer Learning, *IEEE Transactions on Knowledge and Data Engineering*, 22, 10, 1345–1359.
- Panakkat, A. & Adeli, H., 2007, Neural Network Models for Earthquake Magnitude Prediction Using Multiple Seismicity Indicators, *International Journal of Neural Systems*, 17, 01, 13–33.
- Pranita, E., 2021, 4 Fakta Perkembangan Riset BMKG tentang Prediksi Gempa Bumi di Indonesia, <https://www.kompas.com/sains/read/2021/06/06/110100223/4-fakta-perkembangan-riset-bmkg-tentang-prediksi-gempa-bumi-di-indonesia>.
- Putra, A.E., Suryanto, W. & Sulistyana, A.N., 2018, Analysis of 2006 Merapi Eruption Data Based on Continous Wavelet Transform, Wavelet

- Decomposition and Correlation, *International Journal of Advanced Research in Science, Engineering and Technology*, 5, 12.
- Rajpoot, R., Gour, M., Jain, S. & Semwal, V.B., 2024, Integrated ensemble CNN and explainable AI for COVID-19 diagnosis from CT scan and X-ray images, *Scientific Reports*, 14, 1, 24985.
- Rasel, R.I., Sultana, N., Azharul Islam, G.M., Islam, M. & Meesad, P., 2019, Spatio-Temporal Seismic Data Analysis for Predicting Earthquake: Bangladesh Perspective, *RI2C 2019 - 2019 Research, Invention, and Innovation Congress*.
- Reyes, J., Morales-Esteban, A. & Martínez-Álvarez, F., 2013, Neural networks to predict earthquakes in Chile, *Applied Soft Computing*, 13, 2, 1314–1328.
- Ridzwan, N.S.M. & Yusoff, S.H.Md., 2023, Machine learning for earthquake prediction: a review (2017–2021), *Earth Science Informatics*, 16, 2, 1133–1149.
- Salam, M.A., Ibrahim, L. & Abdelminaam, D.S., 2021, Earthquake Prediction using Hybrid Machine Learning Techniques, *International Journal of Advanced Computer Science and Applications*, 12, 5.
- Salehin, I. & Kang, D.-K., 2023, A Review on Dropout Regularization Approaches for Deep Neural Networks within the Scholarly Domain, *Electronics*, 12, 14, 3106.
- Sbarra, P., Burrato, P., Tosi, P., Vannoli, P., De Rubeis, V. & Valensise, G., 2019, Inferring the depth of pre-instrumental earthquakes from macroseismic intensity data: a case-history from Northern Italy, *Scientific Reports*, 9, 1, 15583.
- Sharma, A., Ahuja, A., Devi, S. & Pasari, S., 2022, Use of Spatio-temporal Features for Earthquake Forecasting of imbalanced Data, Dalam, *2022 International Conference on Intelligent Innovations in Engineering and Technology (ICIET)*, IEEE, hlm. 178–182.,
- Sharma, N., Jain, V. & Mishra, A., 2018, An Analysis Of Convolutional Neural Networks For Image Classification, *Procedia Computer Science*, 132, 377–384.
- Shodiq, M.N., Kusuma, D.H., Rifqi, M.G., Barakbah, A.R. & Harsono, T., 2019, Adaptive Neural Fuzzy Inference System and Automatic Clustering for Earthquake Prediction in Indonesia, *JOIV: International Journal on Informatics Visualization*, 3, 1.
- Shodiq, M.N., Kusuma, D.H., Rifqi, M.G., Barakbah, A.R. & Harsono, T., 2018, Neural Network for Earthquake Prediction Based on Automatic Clustering in Indonesia, *JOIV: International Journal on Informatics Visualization*, 2, 1, 37.
- Shodiq, M.N., Kusuma, D.H., Rifqi, M.G., Barakbah, A.R. & Harsono, T., 2017, Spatial analysis of magnitude distribution for earthquake prediction using neural network based on automatic clustering in Indonesia, Dalam, *2017 International Electronics Symposium on Knowledge Creation and Intelligent Computing (IES-KCIC)*, IEEE, hlm. 246–251.,
- Sibson, R.H., 1986, Earthquakes and Rock Deformation in Crustal Fault Zones, *Annual Review of Earth and Planetary Sciences*, 14, 1, 149–175.

- Silverman, Bernard.W., 1986, *Density Estimation for Statistics and Data Analysis*, edisi ke 1st,
- Singh, D., Merdivan, E., Hanke, S., Kropf, J., Geist, M. & Holzinger, A., 2017, Convolutional and Recurrent Neural Networks for Activity Recognition in Smart Environment, Dalam, hlm. 194–205.,
- Singh, P., Singh, N., Singh, K.K. & Singh, A., 2021, Diagnosing of disease using machine learning, Dalam, *Machine Learning and the Internet of Medical Things in Healthcare*, Elsevier, hlm. 89–111.,
- Sirimongkolkasem, T. & Drikvandi, R., 2019, On Regularisation Methods for Analysis of High Dimensional Data, *Annals of Data Science*, 6, 4, 737–763.
- Song, X., Liu, Y., Xue, L., Wang, Jun, Zhang, J., Wang, Junqiang, Jiang, L. & Cheng, Z., 2020, Time-series well performance prediction based on Long Short-Term Memory (LSTM) neural network model, *Journal of Petroleum Science and Engineering*, 186, 106682.
- Sonthalia, A., Pasari, S. & Devi, S., 2023, Earthquake Prediction using Long Short Term Memory on Spatio-Temporally Segmented Data, Dalam, *2023 Third International Conference on Artificial Intelligence and Smart Energy (ICAIS)*, IEEE, hlm. 1378–1382.,
- Srivastava, N., Koehler, J., Nava, F.A., Sayed, O. El, Chakraborty, M., Steinheimer, J., Faber, J., Kies, A., Thingbajam, K.K., Zhou, K., Ruempker, G. & Stoecker, H., 2022, Sunda-arc seismicity: continuing increase of high-magnitude earthquakes since 2004, <https://arxiv.org/abs/2108.06557>.,
- Storchak, D.A., Di Giacomo, D., Bondar, I., Engdahl, E.R., Harris, J., Lee, W.H.K., Villasenor, A. & Bormann, P., 2013, Public Release of the ISC-GEM Global Instrumental Earthquake Catalogue (1900-2009), *Seismological Research Letters*, 84, 5, 810–815.
- Su, Z. & Zhang, Q., 2020a, Earthquake prediction based on Bi-LSTM+CRF model and Spatio-Temporal Data, Dalam, *2020 IEEE 9th Joint International Information Technology and Artificial Intelligence Conference (ITAIC)*, IEEE, hlm. 1190–1195.,
- Su, Z. & Zhang, Q., 2020b, Earthquake prediction based on Bi-LSTM+CRF model and Spatio-Temporal Data, Dalam, *2020 IEEE 9th Joint International Information Technology and Artificial Intelligence Conference (ITAIC)*, IEEE, hlm. 1190–1195.,
- Tax, N., 2018, Human Activity Prediction in Smart Home Environments with LSTM Neural Networks, Dalam, *2018 14th International Conference on Intelligent Environments (IE)*, IEEE, hlm. 40–47.,
- Thanassoulas, C., 2007, *Short-term Earthquake Prediction*, ISBN: 978-960-930268-5.
- Thanassoulas, C., Klentos, V., 2019, How “Short” a “Short-term earthquake prediction” can be? A review of the case of Skyros Island, Greece, EQ (26/7/2001, Ms = 6.1 R)., *arXiv: Geophysics*.
- Thomas, J.N., Masci, F. & Love, J.J., 2015, On a report that the 2012; 6.0 earthquake in Italy was predicted after seeing an unusual cloud formation, *Natural Hazards and Earth System Sciences*, 15, 5, 1061–1068.

- Ünlü, K.D., 2022, A Data-Driven Model to Forecast Multi-Step Ahead Time Series of Turkish Daily Electricity Load, *Electronics*, 11, 10, 1524.
- USGS, 2024, Comprehensive Earthquake Catalog (ComCat) Documentation,
- Verianto, E. & Oetomo, B.S.D., 2021, Artificial Neural Network Model with PSO as a Learning Method to Predict Movement of the Rupiah Exchange Rate against the US Dollar, *IJAIT (International Journal of Applied Information Technology)*, 81.
- Verstappen, H.Th., 2010, Indonesian Landforms and Plate Tectonics, *Indonesian Journal on Geoscience*, 5, 3, 197–207.
- Walia, S., Kumar, K., Agarwal, S. & Kim, H., 2022, Using XAI for Deep Learning-Based Image Manipulation Detection with Shapley Additive Explanation, *Symmetry*, 14, 8, 1611.
- Wand, M.P. & Jones, M.C., 1994, *Kernel Smoothing*, Chapman and Hall/CRC.
- Wandono, W., Widiyantoro, S., Ibrahim, G. & Soewono, E., 2009, Analisis Hubungan Frekuensi-Magnitudo Gempa Bumi di Bali dan Sekitarnya, *Jurnal Matematika dan Sains*, 9, 3.
- Wang, Q., Guo, Y., Yu, L. & Li, P., 2017, Earthquake Prediction Based on Spatio-Temporal Data Mining: An LSTM Network Approach, *IEEE Transactions on Emerging Topics in Computing*, 8, 1, 148–158.
- Wong, D.W.S. & Lee, J., 2005, *Statistical Analysis of Geographic Information with ArcView GIS and ArcGIS*, Wiley.
- Wu, A., Khan, I. & Kwon, Y.-W., 2025, A transformer-based real-time earthquake detection framework in heterogeneous environments, *Scientific Reports*, 15, 1, 8422.
- Wu, M.-H., Wang, J.-P., Shyu, J.B.H., Chang, S.-C. & Sung, C.-Y., 2025, Estimating earthquake magnitudes induced by active faults: Bayesian approach, *Geoscience Letters*, 12, 1, 11.
- Xu, Y. & Goodacre, R., 2018, On Splitting Training and Validation Set: A Comparative Study of Cross-Validation, Bootstrap and Systematic Sampling for Estimating the Generalization Performance of Supervised Learning, *Journal of Analysis and Testing*, 2, 3, 249–262.
- Yan, M., Tong, Q., Wang, R., Luo, C., Land, W., Gao, Y. & Pan, Y., 2016, Outliers detection of cultivated land quality grade results based on spatial autocorrelation, Dalam, *2016 Fifth International Conference on Agro-Geoinformatics (Agro-Geoinformatics)*, IEEE, hlm. 1–5.,
- Yano, T.E., Takeda, T., Matsubara, M. & Shiomi, K., 2017, Japan unified high-resolution relocated catalog for earthquakes (JUICE): Crustal seismicity beneath the Japanese Islands, *Tectonophysics*, 702, 19–28.
- Yousefzadeh, M., Hosseini, S.A. & Farnaghi, M., 2021, Spatiotemporally explicit earthquake prediction using deep neural network, *Soil Dynamics and Earthquake Engineering*, 144, 106663.
- Yuliana, R., Rahmaniati, M., Apriantini, I. & Triarjunet, R., 2022, Analisis Autokorelasi Spasial Kasus Demam Berdarah Dengue di Kota Padang Tahun 2020, *JIK JURNAL ILMU KESEHATAN*, 6, 1, 34.

- Zambom, A.Z. & Dias, R., 2012, A Review of Kernel Density Estimation with Applications to Econometrics, *arXiv: Methodology*.  
<https://api.semanticscholar.org/CorpusID:88513503>.
- Zhang, X., Reichard-Flynn, W., Zhang, M., Hirn, M. & Lin, Y., 2022a, Spatiotemporal Graph Convolutional Networks for Earthquake Source Characterization, *Journal of Geophysical Research: Solid Earth*, 127, 11.
- Zhang, X., Reichard-Flynn, W., Zhang, M., Hirn, M. & Lin, Y., 2022b, Spatiotemporal Graph Convolutional Networks for Earthquake Source Characterization, *Journal of Geophysical Research: Solid Earth*, 127, 11.
- Zheng, M., Xie, X., Jiang, Y., Shen, Q., Geng, X., Zhao, L. & Jia, F., 2024, Optimizing Kernel Density Estimation Bandwidth for Road Traffic Accident Hazard Identification: A Case Study of the City of London, *Sustainability*, 16, 6969.
- Zou, H. & Hastie, T., 2005, Regularization and Variable Selection Via the Elastic Net, *Journal of the Royal Statistical Society Series B: Statistical Methodology*, 67, 2, 301–320.