

DAFTAR PUSTAKA

- Abedi, A., & Khan, S. S. (2025). Engagement Measurement Based on Facial Landmarks and Spatial-Temporal Graph Convolutional Networks. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics): Vol. 15313 LNCS* (pp. 321–338). https://doi.org/10.1007/978-3-031-78201-5_21
- Adaloglou, N. (2020). *How Attention works in Deep Learning: understanding the attention mechanism in sequence models*. AI SUMMER. <https://theaisummer.com/attention/>
- Aldi, F., Nozomi, I., & Soheri, S. (2022). Comparison of Drug Type Classification Performance Using KNN Algorithm. *Sinkron*, 7(3), 1028–1034. <https://doi.org/10.33395/sinkron.v7i3.11487>
- Ayuningtyas, A. D. (2024). *2023 Capai Angka Tertinggi Kecelakaan Lalu Lintas 5 Tahun Terakhir*. Goodstats.Id. <https://goodstats.id/article/2023-capai-angka-tertinggi-kecelakaan-lalu-lintas-5-tahun-terakhir-z67bk>
- Bagui, S. S., Mink, D., Bagui, S. C., & Subramaniam, S. (2023). Determining Resampling Ratios Using BSMOTE and SVM-SMOTE for Identifying Rare Attacks in Imbalanced Cybersecurity Data. *Computers*, 12(10). <https://doi.org/10.3390/computers12100204>
- Basva, A. (2021). *NTHU-DDD*. Kaggle.Com. <https://www.kaggle.com/datasets/banudeep/nthuddd2>
- 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. *International Journal of Advanced Computer Science and Applications*, 15(2), 331–339. <https://doi.org/10.14569/IJACSA.2024.0150235>
- Cao, M., Yao, R., Xia, J., Jia, K., & Wang, H. (2022). LSTM Attention Neural-Network-Based Signal Detection for Hybrid Modulated Faster-Than-Nyquist Optical Wireless Communications †. *Sensors*, 22(22). <https://doi.org/10.3390/s22228992>
- Chandel, S., & Kumar Rathore, Y. (2024). Real-Time Driver Drowsiness Detection System Based on fast R-CNN. In *International Research Journal of Engineering and Technology*. www.irjet.net
- Chandiwala, J., & Agarwal, S. (2021). Driver's real-time Drowsiness Detection using Adaptable Eye Aspect Ratio and Smart Alarm System. In *2021 7th International Conference on Advanced Computing and Communication Systems, ICACCS 2021* (pp. 1350–1355).

<https://doi.org/10.1109/ICACCS51430.2021.9441756>

- Cuzzolin, F., & Eds, M. S. (2023). Epistemic Uncertainty in Artificial Intelligence. In *Lecture Notes in Computer Science*.
- Dang, Y., Yang, E., Liu, Y., Guo, G., Jiang, L., Zhao, J., & Wang, X. (2024). *Data Augmentation for Sequential Recommendation: A Survey*. <http://arxiv.org/abs/2409.13545>
- Dipu, M. T. A., Hossain, S. S., Arafat, Y., & Rafiq, F. B. (2021). Real-time Driver Drowsiness Detection using Deep Learning. In *International Journal of Advanced Computer Science and Applications* (Vol. 12, Issue 7, pp. 844–850). <https://doi.org/10.14569/IJACSA.2021.0120794>
- Ehsan, M. A., Shahirinia, A., Zhang, N., & Oladunni, T. (2020). Wind Speed Prediction and Visualization Using Long Short-Term Memory Networks (LSTM). *10th International Conference on Information Science and Technology, ICIST 2020, June 2023*, 234–240. <https://doi.org/10.1109/ICIST49303.2020.9202300>
- Eland, M. (2022). *Interpreting Confusion Matrixes*. Accessible AI. https://accessibleai.dev/post/interpreting_confusion_matrixes/
- Fan, J., & Smith, A. P. (2020). Effects of Occupational Fatigue on Cognitive Performance of Staff From a Train Operating Company: A Field Study. In *Frontiers in Psychology* (Vol. 11). <https://doi.org/10.3389/fpsyg.2020.558520>
- Faraji, F., Lotfi, F., Khorramdel, J., Najafi, A., & Ghaffari, A. (2021). *Drowsiness Detection Based On Driver Temporal Behavior Using a New Developed Dataset*. <http://arxiv.org/abs/2104.00125>
- Florez, R., Palomino-Quispe, F., Coaquira-Castillo, R. J., Herrera-Levano, J. C., Paixão, T., & Alvarez, A. B. (2023). A CNN-Based Approach for Driver Drowsiness Detection by Real-Time Eye State Identification. In *Applied Sciences (Switzerland)* (Vol. 13, Issue 13). <https://doi.org/10.3390/app13137849>
- Franke, M., & Degen, J. (2023). The softmax function : Properties , motivation , and interpretation. *PsyArXiv*, 1–23.
- Hao, S., Lee, D. H., & Zhao, D. (2019). Sequence to sequence learning with attention mechanism for short-term passenger flow prediction in large-scale metro system. *Transportation Research Part C: Emerging Technologies*, 107(August), 287–300. <https://doi.org/10.1016/j.trc.2019.08.005>
- Hellín, C. J., Olmedo, A. A., Valledor, A., Gómez, J., López-Benítez, M., & Tayebi, A. (2024). Unraveling the Impact of Class Imbalance on Deep-Learning

- Models for Medical Image Classification. *Applied Sciences (Switzerland)*, 14(8). <https://doi.org/10.3390/app14083419>
- Holdsworth, J., & Scapicchio, M. (2024). *What is deep learning?* <https://www.ibm.com/topics/deep-learning>
- Hossain, M. S., Shahriar, G. M., Syeed, M. M. M., Uddin, M. F., Hasan, M., Shivam, S., & Advani, S. (2023). Region of interest (ROI) selection using vision transformer for automatic analysis using whole slide images. In *Scientific Reports* (Vol. 13, Issue 1). <https://doi.org/10.1038/s41598-023-38109-6>
- Hotaru Komajou. (2023). *Mediapipe landmark face/hand/pose sequence number list view*. Medium. <https://medium.com/@hotakoma/mediapipe-landmark-face-hand-pose-sequence-number-list-view-778364d6c414>
- Ilerioluwakiiye. (2025). *Introduction to Neural Networks*. AI Mind. <https://pub.aimind.so/introduction-to-neural-networks-e8afa2ac2e51>
- Inkeaw, P., Srikummoon, P., Chaijaruwanich, J., Traisathit, P., Awiphan, S., Inchai, J., Worasuthaneewan, R., & Theerakittikul, T. (2022). Automatic Driver Drowsiness Detection Using Artificial Neural Network Based on Visual Facial Descriptors: Pilot Study. In *Nature and Science of Sleep* (Vol. 14, pp. 1641–1649). <https://doi.org/10.2147/NSS.S376755>
- Kalita, D. (2025). *What is Recurrent Neural Networks (RNN)?* Analytics Vidhya. <https://www.analyticsvidhya.com/blog/2022/03/a-brief-overview-of-recurrent-neural-networks-rnn/>
- Kiranyaz, S., Ince, T., Abdeljaber, O., Avci, O., & Gabbouj, M. (2019). 1-D Convolutional Neural Networks for Signal Processing Applications. *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, 2019-May(May), 8360–8364. <https://doi.org/10.1109/ICASSP.2019.8682194>
- L.Thulasimani, Poojeevan P, Prithashasni S P. (2021). Real Time Driver Drowsiness Detection using OpenCV and Facial Landmarks. In *Journal of Contemporary Issues in Business and Government* (Vol. 27, Issue 6). <https://doi.org/10.47750/cibg.2021.27.06.054>
- Lestari, D. (2021). *KNKT: 80 Persen Kecelakaan di Tol Akibat Mengantuk dan Letih*. Siddqui, Hafeez Ur Rehman; Saleem, Adil Ali; Bbowrn, Robert; Bademci, Bahattin; Lee, Enesto; Rustam, Furqan; Dudley, Sandra
- Lovell, D., Miller, D., Capra, J., & Bradley, A. (2022). *Never mind the metrics -- what about the uncertainty? Visualising confusion matrix metric distributions*. <http://arxiv.org/abs/2206.02157>

- Mohan, A. T., & Gaitonde, D. V. (2018). *A Deep Learning based Approach to Reduced Order Modeling for Turbulent Flow Control using LSTM Neural Networks*. April. <https://doi.org/10.48550/arXiv.1804.09269>
- Moradi, A., Nazari, S. S. H., & Rahmani, K. (2019). Sleepiness and the risk of road traffic accidents: A systematic review and meta-analysis of previous studies. In *Transportation Research Part F: Traffic Psychology and Behaviour* (Vol. 65, pp. 620–629). <https://doi.org/10.1016/j.trf.2018.09.013>
- Muthukumar G., & Jyosna Philip. (2024). CNN-LSTM Hybrid Deep Learning Model for Remaining Useful Life Estimation. *International Journal for Innovative Research in Multidisciplinary Field (IJIRMF)*, 10(Special Issue-54), 38–50. <https://www.ijirmf.com>
- Pelletier, H. (2023). *How-To: Cross Validation with Time Series Data*. Towardsdatascience.Com. <https://towardsdatascience.com/how-to-cross-validation-with-time-series-data-9802a06272c6>
- Plubin, S., Bunyatisai, W., Khamkong, M., Mouktonglang, T., & Plubin, B. (2024). Multilabel-Thai Text Classification with Transformer-Rnn in Thai Banking Classification. In *Pakistan Journal of Life and Social Sciences* (Vol. 23, Issue 1, pp. 1–10). <https://doi.org/10.57239/PJLSS-2025-23.1.001>
- Puente-Castro, A., Fernandez-Blanco, E., Rivero, D., & Molares-Ulloa, A. (2025). *Enhancing Orthopox Image Classification Using Hybrid Machine Learning and Deep Learning Models*. <http://arxiv.org/abs/2506.06007>
- Rajan, R., & Kumar, S. N. (2023). IoT based optical coherence tomography retinal images classification using OCT Deep Net2. *Measurement: Sensors*, 25(January), 100652. <https://doi.org/10.1016/j.measen.2022.100652>
- Ram, D. C. S., Koushik, D. J. V. ., & Pavan, H. S. (2024). Drowsiness Detection using EAR (Eye Aspect Ratio) by Machine Learning. In *Interantional Journal of Scientific Research in Engineering and Management* (Vol. 08, Issue 01, pp. 1–13). <https://doi.org/10.55041/ijsrem19675>
- Rupani, V. S. K., Thushar, V. V. S., & Tejith, K. (2024). Real-Time Drowsiness Detection Using Eye Aspect Ratio and Facial Landmark Detection. In *arXiv preprint arXiv:2408.05836*. <https://arxiv.org/abs/2408.05836>
<https://arxiv.org/pdf/2408.05836>
- Safarov, F., Akhmedov, F., Abdusalomov, A. B., Nasimov, R., & Cho, Y. I. (2023). Real-Time Deep Learning-Based Drowsiness Detection: Leveraging Computer-Vision and Eye-Blink Analyses for Enhanced Road Safety. In *Sensors* (Vol. 23, Issue 14). <https://doi.org/10.3390/s23146459>
- Salem, D., & Waleed, M. (2024). Drowsiness detection in real-time via

- convolutional neural networks and transfer learning. In *Journal of Engineering and Applied Science* (Vol. 71, Issue 1). <https://doi.org/10.1186/s44147-024-00457-z>
- Saputra S, K., Taufik, I., Farahdilla Dharma, D., & Hidayat, M. (2021). Analisis Perbaikan Kualitas Citra Menggunakan CLAHE dan HE Pada Citra X-Ray Covid-19 dan Pneumonia. In *IJCIT (Indonesian Journal on Computer and Information Technology)* (Vol. 6, Issue 2). <https://doi.org/10.31294/ijcit.v6i2.10855>
- Schwarz, C., Gaspar, J., & Yousefian, R. (2023). Sequence Analysis of Monitored Drowsy Driving. *Transportation Research Record*, 2677(8), 553–562. <https://doi.org/10.1177/03611981231157401>
- Siddiqui, H. U. R., Saleem, A. A., Bbowrn, R., Bademci, B., Lee, E., Rustam, F., & Dudley, S. (2021). *Non-Invasive Driver Drowsiness Detection System*. mdpi.com.
- Suni, E., & Anis, D. R. (2023). *Drowsy Driving*. <https://www.sleepfoundation.org/drowsy-driving>
- Taub, E. A. (2018). *2-Second Rule for Distracted Driving Can Mean Life or Death*. New York Times. <https://www.nytimes.com/2018/09/27/business/distracted-driving-auto-industry.html>
- Uma Maheswari, V., Aluvalu, R., Prasad Kantipudi, M. V. V., Chennam, K. K., Kotecha, K., & Saini, J. R. (2022). Driver Drowsiness Prediction Based on Multiple Aspects Using Image Processing Techniques. In *IEEE Access* (Vol. 10, pp. 54980–54990). <https://doi.org/10.1109/ACCESS.2022.3176451>
- Wan, J., Liu, H., Wu, Y., Lai, Z., Min, W., & Liu, J. (2024). Precise facial landmark detection by Dynamic Semantic Aggregation Transformer. In *Pattern Recognition* (Vol. 156). <https://doi.org/10.1016/j.patcog.2024.110827>
- Waqas, M., & Humphries, U. W. (2024). A Critical Review of RNN and LSTM Variants in Hydrological Time Series Predictions. In *MethodsX* (p. 102946).
- Zhang, H., Ni, D., Ding, N., Sun, Y., Zhang, Q., & Li, X. (2023). Structural analysis of driver fatigue behavior: A systematic review. In *Transportation Research Interdisciplinary Perspectives* (Vol. 21). <https://doi.org/10.1016/j.trip.2023.100865>
- Zou, J., Yuan, C., Zhang, X., Zou, G., & Wan, A. T. K. (2021). *Model Averaging for Support Vector Machine by Cross-Validation*. 1, 1–33. <http://arxiv.org/abs/2112.14578>
- Zu, S., Jin, Y., Yang, D., & Xu, H. (2022). DrowsyNet: Multivariate Time Series

Classification for Embedded Driver Drowsiness Detection. In *2022 8th International Conference on Control, Automation and Robotics, ICCAR 2022* (pp. 442–451). <https://doi.org/10.1109/ICCAR55106.2022.9782626>