

## DAFTAR PUSTAKA

- [1] H. Sung *et al.*, “Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries,” *CA Cancer J Clin*, vol. 71, no. 3, pp. 209–249, May 2021, doi: 10.3322/caac.21660.
- [2] Kementerian Kesehatan Republik Indonesia, “Kanker Payudara Paling Banyak di Indonesia, Kemenkes Targetkan Pemerataan Layanan Kesehatan,” *Kementerian Kesehatan RI*, Feb. 22, 2022. <https://www.kemkes.go.id/article/view/22020400002/kanker-payudara-paling-banyak-di-indonesia-kemenkes-targetkan-pemerataan-layanan-kesehatan.html> (accessed Apr. 24, 2023).
- [3] Globocan, “Indonesia - Global Cancer Observatory,” *Globocan*, 2020. <https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-factsheets.pdf> (accessed Apr. 24, 2023).
- [4] “Breast Cancer Signs and Symptoms,” *American Cancer Society*. <https://www.cancer.org/cancer/breast-cancer/about/breast-cancer-signs-and-symptoms.html> (accessed Apr. 24, 2023).
- [5] “Beda USG Payudara dan Mammografi, Mana yang Lebih Unggul?,” *KORAN JAKARTA*, Feb. 08, 2023. <https://koran-jakarta.com/beda-usg-payudara-dan-mammografi-mana-yang-lebih-unggul?page=all> (accessed Apr. 24, 2023).
- [6] “Breast Ultrasound Accreditation Program Requirements,” *American College of Radiology*, 2019. <https://www.acraccr.com/modality-accreditation/breast-ultrasound> (accessed Apr. 24, 2023).
- [7] F. A. Huber, F. Del Grande, S. Rizzo, G. Guglielmi, and R. Guggenberger, “MRI in the assessment of adipose tissues and muscle composition: how to use it,” *Quant Imaging Med Surg*, vol. 10, no. 8, pp. 1636–1649, Aug. 2020, doi: 10.21037/qims.2020.02.06.
- [8] W. Al-Dhabyani, M. Gomaa, H. Khaled, and A. Fahmy, “Dataset of breast ultrasound images,” *Data Brief*, vol. 28, p. 104863, Feb. 2020, doi: 10.1016/j.dib.2019.104863.
- [9] N. Nasution, P. Prajitno, and D. S. Soejoko, “Effectiveness of using computer aided detection based on convolutional neural network for screening microcalcification On USG Mammae,” *J Phys Conf Ser*, vol. 1816, no. 1, p. 012097, Feb. 2021, doi: 10.1088/1742-6596/1816/1/012097.
- [10] Y. Guo, X. Duan, C. Wang, and H. Guo, “Segmentation and recognition of breast ultrasound images based on an expanded U-Net,” *PLoS One*, vol. 16, no. 6, p. e0253202, Jun. 2021, doi: 10.1371/journal.pone.0253202.

- [11] P. O. Vianna, R. Farias, and W. C. A. Pereira, "Performance of the SegNet in the Segmentation of Breast Ultrasound Lesions," in *2021 Global Medical Engineering Physics Exchanges/Pan American Health Care Exchanges (GMEPE/PAHCE)*, IEEE, Mar. 2021, pp. 1–4. doi: 10.1109/GMEPE/PAHCE50215.2021.9434877.
- [12] S. Zhang *et al.*, "Fully automatic tumor segmentation of breast ultrasound images with deep learning," *J Appl Clin Med Phys*, vol. 24, no. 1, Jan. 2023, doi: 10.1002/acm2.13863.
- [13] H. Kai, Z. Y. Feng, H. Meng, F. Y. Baoping, and Y. R. Han, "Ultrasound Image Segmentation of Breast Tumors Based on Swin-transformerv2," in *Proceedings of the 2022 10th International Conference on Information Technology: IoT and Smart City*, New York, NY, USA: ACM, Dec. 2022, pp. 106–111. doi: 10.1145/3582197.3582214.
- [14] S. B. Dizaj and P. Valizadeh, "Breast cancer segmentation and classification in ultrasound images using convolutional neural network," *International Conference on Pattern Recognition and Image Analysis (IPRIA) Department of Electrical and Computer Engineering*, pp. 1–8, Oct. 2021.
- [15] "KENALI BERBAGAI GEJALA KANKER PAYUDARA," *Dinas Kesehatan Daerah Istimewa Yogyakarta*, Oct. 03, 2016. <https://dinkes.jogjaprovo.go.id/berita/detail/kanker-payudara-kenali-berbagai-gejala-kanker-payudara> (accessed Apr. 26, 2023).
- [16] "Practice Bulletin Number 179: Breast Cancer Risk Assessment and Screening in Average-Risk Women," *Obstet Gynecol*, vol. 130, no. 1, pp. e1–e16, Jul. 2017.
- [17] Q. Sun *et al.*, "Deep Learning vs. Radiomics for Predicting Axillary Lymph Node Metastasis of Breast Cancer Using Ultrasound Images: Don't Forget the Peritumoral Region," *Front Oncol*, vol. 10, no. 53, Jan. 2020.
- [18] R. Almajalid, J. Shan, Y. Du, and M. Zhang, "Development of a Deep-Learning-Based Method for Breast Ultrasound Image Segmentation," in *2018 17th IEEE International Conference on Machine Learning and Applications (ICMLA)*, IEEE, Dec. 2018, pp. 1103–1108. doi: 10.1109/ICMLA.2018.00179.
- [19] A. T. Stavros, D. Thickman, C. L. Rapp, M. A. Dennis, S. H. Parker, and G. A. Sisney, "Solid breast nodules: use of sonography to distinguish between benign and malignant lesions.," *Radiology*, vol. 196, no. 1, pp. 123–134, Jul. 1995, doi: 10.1148/radiology.196.1.7784555.
- [20] L. M. F. H. Neeter *et al.*, "Comparing the Diagnostic Performance of Contrast-Enhanced Mammography and Breast MRI: a Systematic Review and Meta-Analysis," *J Cancer*, vol. 14, no. 1, pp. 174–182, 2023, doi: 10.7150/jca.79747.

- [21] A. Evans *et al.*, “Breast ultrasound: recommendations for information to women and referring physicians by the European Society of Breast Imaging,” *Insights Imaging*, vol. 9, no. 4, pp. 449–461, Aug. 2018, doi: 10.1007/s13244-018-0636-z.
- [22] Jin Liu, Min Li, Jianxin Wang, Fangxiang Wu, Tianming Liu, and Yi Pan, “A survey of MRI-based brain tumor segmentation methods,” *Tsinghua Sci Technol*, vol. 19, no. 6, pp. 578–595, Dec. 2014, doi: 10.1109/TST.2014.6961028.
- [23] M. Z. Alom *et al.*, “A State-of-the-Art Survey on Deep Learning Theory and Architectures,” *Electronics (Basel)*, vol. 8, no. 3, p. 292, Mar. 2019, doi: 10.3390/electronics8030292.
- [24] B. Jdid, K. Hassan, I. Dayoub, W. H. Lim, and M. Mokayef, “Machine Learning Based Automatic Modulation Recognition for Wireless Communications: A Comprehensive Survey,” *IEEE Access*, vol. 9, pp. 57851–57873, 2021, doi: 10.1109/ACCESS.2021.3071801.
- [25] T. Takagi and M. Sugeno, “Fuzzy identification of systems and its applications to modeling and control,” *IEEE Trans Syst Man Cybern*, vol. SMC-15, no. 1, pp. 116–132, Jan. 1985, doi: 10.1109/TSMC.1985.6313399.
- [26] S. Kirkpatrick, C. D. Gelatt, and M. P. Vecchi, “Optimization by Simulated Annealing,” *Science (1979)*, vol. 220, no. 4598, pp. 671–680, May 1983, doi: 10.1126/science.220.4598.671.
- [27] J. Kennedy and R. Eberhart, “Particle swarm optimization,” in *Proceedings of ICNN’95 - International Conference on Neural Networks*, IEEE, 1995, pp. 1942–1948. doi: 10.1109/ICNN.1995.488968.
- [28] M. I. Jordan and T. M. Mitchell, “Machine learning: Trends, perspectives, and prospects,” *Science (1979)*, vol. 349, no. 6245, pp. 255–260, Jul. 2015, doi: 10.1126/science.aaa8415.
- [29] J. Heaton, *Ian Goodfellow, Yoshua Bengio, and Aaron Courville: Deep learning*, vol. 19. 2018. doi: 10.1007/s10710-017-9314-z.
- [30] Y. LeCun, Y. Bengio, and G. Hinton, “Deep learning,” *Nature*, vol. 521, no. 7553, pp. 436–444, May 2015, doi: 10.1038/nature14539.
- [31] V. Tatan, “Understanding CNN (Convolutional Neural Network),” *Towards Data Science*, Dec. 23, 2019.
- [32] L. Alzubaidi *et al.*, “Review of deep learning: concepts, CNN architectures, challenges, applications, future directions,” *J Big Data*, vol. 8, no. 1, p. 53, Mar. 2021, doi: 10.1186/s40537-021-00444-8.
- [33] D. H. Hubel and T. N. Wiesel, “Receptive fields, binocular interaction and functional architecture in the cat’s visual cortex,” *J Physiol*, vol. 160, no. 1, pp. 106–154, Jan. 1962.

- [34] M. D. Zeiler and R. Fergus, “Stochastic Pooling for Regularization of Deep Convolutional Neural Networks,” *arXiv preprint*, pp. 1–9, Jan. 2013.
- [35] A. Krizhevsky, I. Sutskever, and G. E. Hinton, “ImageNet classification with deep convolutional neural networks,” *Commun ACM*, vol. 60, no. 6, pp. 84–90, May 2017, doi: 10.1145/3065386.
- [36] Y. Lecun, L. Bottou, Y. Bengio, and P. Haffner, “Gradient-based learning applied to document recognition,” *Proceedings of the IEEE*, vol. 86, no. 11, pp. 2278–2324, 1998, doi: 10.1109/5.726791.
- [37] X. Glorot and Y. Bengio, “Understanding the Difficulty of Training Deep Feedforward Neural Networks,” *Proceedings of the Thirteenth International Conference on Artificial Intelligence and Statistics*, vol. 9, pp. 249–256, 2010.
- [38] J. Chen, J. Liu, and V. D. Calhoun, “Translational Potential of Neuroimaging Genomic Analyses to Diagnosis and Treatment in Mental Disorders,” *Proceedings of the IEEE*, vol. 107, no. 5, pp. 912–927, May 2019, doi: 10.1109/JPROC.2019.2913145.
- [39] Q. Xu, M. Zhang, Z. Gu, and G. Pan, “Overfitting remedy by sparsifying regularization on fully-connected layers of CNNs,” *Neurocomputing*, vol. 328, pp. 69–74, Feb. 2019, doi: 10.1016/j.neucom.2018.03.080.
- [40] Z. Guodong, W. Chaoqi, X. Bowen, and G. Roger, “Three Mechanisms of Weight Decay Regularization,” *arXiv preprint*, Oct. 2018.
- [41] C. Laurent, G. Pereyra, P. Brakel, Y. Zhang, and Y. Bengio, “Batch normalized recurrent neural networks,” in *2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, IEEE, Mar. 2016, pp. 2657–2661. doi: 10.1109/ICASSP.2016.7472159.
- [42] N. Srivastava, G. Hinton, A. Krizhevsky, I. Sutskever, and R. Salakhutdinov, “Dropout: A Simple Way to Prevent Neural Networks from Overfitting,” *Journal of Machine Learning Research*, vol. 15, no. 56, pp. 1929–1958, 2014.
- [43] C. Shorten and T. M. Khoshgoftaar, “A survey on Image Data Augmentation for Deep Learning,” *J Big Data*, vol. 6, no. 1, p. 60, Dec. 2019, doi: 10.1186/s40537-019-0197-0.
- [44] J. Salamon and J. P. Bello, “Deep Convolutional Neural Networks and Data Augmentation for Environmental Sound Classification,” *IEEE Signal Process Lett*, vol. 24, no. 3, pp. 279–283, Mar. 2017, doi: 10.1109/LSP.2017.2657381.
- [45] I. Sirazitdinov, M. Kholiavchenko, R. Kuleev, and B. Ibragimov, “Data Augmentation for Chest Pathologies Classification,” in *2019 IEEE 16th International Symposium on Biomedical Imaging (ISBI 2019)*, IEEE, Apr. 2019, pp. 1216–1219. doi: 10.1109/ISBI.2019.8759573.

- [46] S. Ruder, “An overview of gradient descent optimization algorithms,” *arXiv preprint*, Sep. 2016.
- [47] T. Tieleman and G. Hinton, “Lecture 6.5-rmsprop: Divide the Gradient by a Running Average of Its Recent Magnitude.,” *COURSERA: Neural Networks for Machine Learning*, vol. 4, no. 2, pp. 26–31, 2012.
- [48] D. P. Kingma and J. Ba, “Adam: A Method for Stochastic Optimization,” *arXiv preprint*, Dec. 2014.
- [49] Z. Zhang, “Improved Adam Optimizer for Deep Neural Networks,” in *2018 IEEE/ACM 26th International Symposium on Quality of Service (IWQoS)*, IEEE, Jun. 2018, pp. 1–2. doi: 10.1109/IWQoS.2018.8624183.
- [50] A. Salim, “Intersection Over Union,” *BISA.AI*, Mar. 25, 2020. <https://medium.com/bisa-ai/intersection-over-union-a8d1532899b3> (accessed May 06, 2023).
- [51] K. S. Nugroho, “Confusion Matrix untuk Evaluasi Model pada Supervised Learning,” *Medium*, Nov. 13, 2019. <https://ksnugroho.medium.com/confusion-matrix-untuk-evaluasi-model-pada-unsupervised-machine-learning-bc4b1ae9ae3f>. (accessed May 06, 2023).
- [52] Neurohive, “VGG16 - Convolutional Network for Classification and Detection,” *Neurohive*, Nov. 20, 2018. <https://neurohive.io/en/popular-networks/vgg16/> (accessed May 07, 2023).
- [53] Fezan, “Understanding of Semantic Segmentation & How Segnet Model work to perform Semantic Segmentation,” *Medium*, Oct. 24, 2019. <https://medium.com/@fezancs/understanding-of-semantic-segmentation-how-segnet-model-work-to-perform-semantic-segmentation-5c426112e499> (accessed May 07, 2023).
- [54] N. Tomar, “What is U-Net?,” *Analytics Vidhya*, Jan. 19, 2021. <https://medium.com/analytics-vidhya/what-is-unet-157314c87634> (accessed Jun. 18, 2023).