

DAFTAR PUSTAKA

- Abiodun, O. I., Jantan, A., Omolara, A. E., Dada, K. V., Mohamed, N. A., & Arshad, H. (2018). State-of-the-art in artificial neural network applications: A survey. *Heliyon*, 4(11), e00938. <https://doi.org/10.1016/j.heliyon.2018.e00938>
- Adaloglou, N. M., Chatzis, T., Papastratis, I., Stergioulas, A., Papadopoulos, G. T., Zacharopoulou, V., Xydopoulos, G., Antzakas, K., Papazachariou, D., & Daras, P. none. (2021). A Comprehensive Study on Deep Learning-based Methods for Sign Language Recognition. *IEEE Transactions on Multimedia*, 1–1. <https://doi.org/10.1109/TMM.2021.3070438>
- Alper, M. (2015). Augmentative, Alternative, and Assistive: Reimagining the History of Mobile Computing and Disability. *IEEE Annals of the History of Computing*, 37(1). <https://doi.org/10.1109/MAHC.2015.3>
- Aman, A. (2021). *EfficientNetV2 – Weights & Biases*. https://wandb.ai/wandb_fc/pytorch-image-models/reports/EfficientNetV2--Vmlldzo2NTkwNTQ
- Avila, J. de. (2011, December 24). *Giving the Gift of Voice With the Touch of a Finger* - *WSJ*. <https://www.wsj.com/articles/SB10001424052970204464404577116603396144464>
- Ayumida, S., Syamsul Azis, M., & Gherar Fiano, Z. (2021). IMPLEMENTASI PROGRAM ADMINISTRASI PEMBAYARAN BERBASIS DEKSTOP (STUDI KASUS: SMA NEGERI 1 CIKAMPEK). *Jurnal Interkom: Jurnal*

Publikasi Ilmiah Bidang Teknologi Informasi Dan Komunikasi, 15(2), 30–41.
<https://doi.org/10.35969/interkom.v15i2.92>

Bantupalli, K., & Xie, Y. (2018, December). American Sign Language Recognition using Deep Learning and Computer Vision. *2018 IEEE International Conference on Big Data (Big Data)*.
<https://doi.org/10.1109/BigData.2018.8622141>

Barbhuiya, A. A., Karsh, R. K., & Jain, R. (2021). CNN based feature extraction and classification for sign language. *Multimedia Tools and Applications, 80(2), 3051–3069*. <https://doi.org/10.1007/s11042-020-09829-y>

Barbosa Neves, B., Franz, R., Judges, R., Beermann, C., & Baecker, R. (2019). Can Digital Technology Enhance Social Connectedness Among Older Adults? A Feasibility Study. *Journal of Applied Gerontology, 38(1)*.
<https://doi.org/10.1177/0733464817741369>

Berke, J. (2021, March 1). *Deaf and Other Nonverbal Users of Sign Language*. Verywellhealth. <https://www.verywellhealth.com/sign-language-nonverbal-users-1046848>

Bhasin, H. (2019). *Python Basics*. Dulles: Mercury Learning and Information.

Bonvillian, J. D., & Nelson, K. E. (1976). Sign Language Acquisition in a Mute Autistic Boy. *Journal of Speech and Hearing Disorders, 41(3), 339–347*.
<https://doi.org/10.1044/jshd.4103.339>

Bragg, D., Koller, O., Bellard, M., Berke, L., Boudreault, P., Braffort, A., Caselli, N., Huenerfauth, M., Kacorri, H., Verhoef, T., Vogler, C., & Ringel Morris, M. (2019, October 24). Sign Language Recognition, Generation, and

- Translation. *The 21st International ACM SIGACCESS Conference on Computers and Accessibility*. <https://doi.org/10.1145/3308561.3353774>
- Chen, L.-P. (2019). Mehryar Mohri, Afshin Rostamizadeh, and Ameet Talwalkar: Foundations of machine learning, second edition. *Statistical Papers*, 60(5), 1793–1795. <https://doi.org/10.1007/s00362-019-01124-9>
- Cheok, M. J., Omar, Z., & Jaward, M. H. (2019). A review of hand gesture and sign language recognition techniques. *International Journal of Machine Learning and Cybernetics*, 10(1). <https://doi.org/10.1007/s13042-017-0705-5>
- Deafness and hearing loss*. (2021, April 1). <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>
- Ghahramani, Z. (2004). *Unsupervised Learning* (pp. 72–112). https://doi.org/10.1007/978-3-540-28650-9_5
- Grebelsky-Lichtman, T. (2014). Children’s Verbal and Nonverbal Congruent and Incongruent Communication During Parent-Child Interactions. *Human Communication Research*, 40(4). <https://doi.org/10.1111/hcre.12035>
- Haile, L. M., Kamenov, K., Briant, P. S., Orji, A. U., Steinmetz, J. D., Abdoli, A., Abdollahi, M., Abu-Gharbieh, E., Afshin, A., Ahmed, H., Ahmed Rashid, T., Akalu, Y., Alahdab, F., Alanezi, F. M., Alanzi, T. M., al Hamad, H., Ali, L., Alipour, V., Al-Raddadi, R. M., ... Chadha, S. (2021). Hearing loss prevalence and years lived with disability, 1990–2019: findings from the Global Burden of Disease Study 2019. *The Lancet*, 397(10278). [https://doi.org/10.1016/S0140-6736\(21\)00516-X](https://doi.org/10.1016/S0140-6736(21)00516-X)
- Hasan, J. M., Septiningrum, L. D., Chaery, A. F., Abdurachman, T. A., & Prawirayudha, A. L. (2020). SISTEM INFORMASI AKUNTANSI

- (FLOWCHART) DALAM PEMBANGUNAN MASJID AL-AULIA. *DEDIKASI PKM*, 2(1), 118. <https://doi.org/10.32493/dedikasipkm.v2i1.8503>
- Hossen, M. A., Govindaiah, A., Sultana, S., & Bhuiyan, A. (2018). Bengali Sign Language Recognition Using Deep Convolutional Neural Network. *2018 Joint 7th International Conference on Informatics, Electronics & Vision (ICIEV) and 2018 2nd International Conference on Imaging, Vision & Pattern Recognition (IcIVPR)*, 369–373. <https://doi.org/10.1109/ICIEV.2018.8640962>
- Humes, L. E. (2019). The World Health Organization’s hearing-impairment grading system: an evaluation for unaided communication in age-related hearing loss. *International Journal of Audiology*, 58(1). <https://doi.org/10.1080/14992027.2018.1518598>
- Ito, S., Ito, M., & Fukumi, M. (2019). Japanese sign language classification based on gathered images and neural networks. *International Journal of Advances in Intelligent Informatics*, 5(3), 243. <https://doi.org/10.26555/ijain.v5i3.406>
- Kaehler, A., & Bradski, G. (2018). *Learning OpenCV 3*. Sebastopol.
- Kamruzzaman, M. M. (2020). Arabic Sign Language Recognition and Generating Arabic Speech Using Convolutional Neural Network. *Wireless Communications and Mobile Computing*, 2020, 1–9. <https://doi.org/10.1155/2020/3685614>
- Kamus SIBI*. (n.d.). Retrieved November 11, 2021, from <https://pmpk.kemdikbud.go.id/sibi/profil>
- Kar, A., & Chatterjee, P. S. (2015, January). An Approach for Minimizing the Time Taken by Video Processing for Translating Sign Language to Simple Sentence

- in English. *2015 International Conference on Computational Intelligence and Networks*. <https://doi.org/10.1109/CINE.2015.40>
- Katoch, S., Singh, V., & Tiwary, U. S. (2022). Indian Sign Language recognition system using SURF with SVM and CNN. *Array*, *14*, 100141. <https://doi.org/10.1016/j.array.2022.100141>
- Kumar, P., Rautaray, S. S., & Agrawal, A. (2012, March). Hand data glove: A new generation real-time mouse for Human-Computer Interaction. *2012 1st International Conference on Recent Advances in Information Technology (RAIT)*. <https://doi.org/10.1109/RAIT.2012.6194548>
- McDaid, D., Park, A.-L., & Chadha, S. (2021). Estimating the global costs of hearing loss. *International Journal of Audiology*, *60*(3). <https://doi.org/10.1080/14992027.2021.1883197>
- Michels, T. C., Duffy, M. T., & Rogers, D. J. (2019). Hearing Loss in Adults: Differential Diagnosis and Treatment. *American Family Physician*, *100*(2), 98–108. <https://doi.org/10.26616/NIOSH PUB2018124>
- Mishra, C., & Gupta, D. L. (2017). Deep Machine Learning and Neural Networks: An Overview. *IAES International Journal of Artificial Intelligence (IJ-AI)*, *6*(2), 66. <https://doi.org/10.11591/ijai.v6.i2.pp66-73>
- Moeslund, T. B., Hilton, A., & Krüger, V. (2006). A survey of advances in vision-based human motion capture and analysis. *Computer Vision and Image Understanding*, *104*(2–3). <https://doi.org/10.1016/j.cviu.2006.08.002>
- Ndungu, R., & Karuga, S. (2022). Sign Language Prediction Model using Convolution Neural Network. *IJID (International Journal on Informatics for Development)*, *10*(2), 92–101. <https://doi.org/10.14421/ijid.2021.3284>

- Ohtsuka, S., Hasegawa, S., Sasaki, N., & Harakawa, T. (2010, January). Communication System between Deaf-Blind People and Non-Disabled People Using Body-Braille and Infrared Communication. *2010 7th IEEE Consumer Communications and Networking Conference*.
<https://doi.org/10.1109/CCNC.2010.5421647>
- Pang, B., Nijkamp, E., & Wu, Y. N. (2020). Deep Learning With TensorFlow: A Review. *Journal of Educational and Behavioral Statistics*, *45*(2), 227–248.
<https://doi.org/10.3102/1076998619872761>
- Pramunanto, E., Sumpeno, S., & Legowo, R. S. (2017, August). Classification of hand gesture in Indonesian sign language system using Naive Bayes. *2017 International Seminar on Sensors, Instrumentation, Measurement and Metrology (ISSIMM)*. <https://doi.org/10.1109/ISSIMM.2017.8124288>
- Prastyo, P. H., Prasetyo, S. E., & Arti, S. (2021). A Machine Learning Framework for Improving Classification Performance on Credit Approval. *IJID (International Journal on Informatics for Development)*, *10*(1), 47–52.
<https://doi.org/10.14421/ijid.2021.2384>
- Priowidodo, G., D. Sari, Y., Inggrit I, I., & Gunawan, S. (2019, January 29). *COMMUNICATION PATTERNS BASED ON SOCIAL MEDIA AS A POLITICAL MARKETING STRATEGY IN INDONESIAN DEMOCRATIC PARTY OF STRUGGLE*. <https://doi.org/10.17501/2357268X.2018.5104>
- Pu, J., Zhou, W., & Li, H. (2019, June). Iterative Alignment Network for Continuous Sign Language Recognition. *2019 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*.
<https://doi.org/10.1109/CVPR.2019.00429>

- Ramadhani, R. A., Putra, I. K. G. D., Sudarma, M., & Giriantari, I. A. D. (2020). Stemming Algorithm for Indonesian Signaling Systems (SIBI). *International Journal of Engineering and Emerging Technology*, 5(1). <https://doi.org/10.24843/IJEET.2020.v05.i01.p11>
- Rao, G. A., Syamala, K., Kishore, P. V. v., & Sastry, A. S. C. S. (2018). Deep convolutional neural networks for sign language recognition. *2018 Conference on Signal Processing And Communication Engineering Systems (SPACES)*, 194–197. <https://doi.org/10.1109/SPACES.2018.8316344>
- Rastgoo, R., Kiani, K., & Escalera, S. (2021). Sign Language Recognition: A Deep Survey. *Expert Systems with Applications*, 164. <https://doi.org/10.1016/j.eswa.2020.113794>
- Samonte, M. J. C., Gazmin, R. A., Soriano, J. D. S., & Valencia, M. N. O. (2019, October). BridgeApp: An Assistive Mobile Communication Application for the Deaf and Mute. *2019 International Conference on Information and Communication Technology Convergence (ICTC)*. <https://doi.org/10.1109/ICTC46691.2019.8939866>
- Samuel, A. L. (1988). Some Studies in Machine Learning Using the Game of Checkers. II—Recent Progress. In *Computer Games I* (pp. 366–400). Springer New York. https://doi.org/10.1007/978-1-4613-8716-9_15
- Sandler, W., & Lillo-Martin, D. (2006). *Sign Language and Linguistic Universals*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139163910>
- Santoso, S., & Nurmalina, R. (2017). Perencanaan dan Pengembangan Aplikasi Absensi Mahasiswa Menggunakan Smart Card Guna Pengembangan Kampus Cerdas. *JURNAL INTEGRASI*, 9(1), 84. <https://doi.org/10.30871/ji.v9i1.288>

- Sarker, I. H. (2021a). Machine Learning: Algorithms, Real-World Applications and Research Directions. *SN Computer Science*, 2(3), 160. <https://doi.org/10.1007/s42979-021-00592-x>
- Sarker, I. H. (2021b). Deep Learning: A Comprehensive Overview on Techniques, Taxonomy, Applications and Research Directions. *SN Computer Science*, 2(6), 420. <https://doi.org/10.1007/s42979-021-00815-1>
- Sharma, S., & Singh, S. (2021). Vision-based hand gesture recognition using deep learning for the interpretation of sign language. *Expert Systems with Applications*, 182. <https://doi.org/10.1016/j.eswa.2021.115657>
- Simanjuntak, N. J., Suryadi, S., & Silaen, G. J. Y. (2019). SISTEM PENGARSIPAN SURAT BAGIAN ORGANISASI DAN TATALAKSANA PADA KANTOR BUPATI LABUHANBATU BERBASIS WEB. *JURNAL INFORMATIKA*, 5(3), 26–36. <https://doi.org/10.36987/informatika.v5i3.733>
- Sistem Informasi Penyandang Disabilitas - Kementerian Sosial RI*. (n.d.). Retrieved October 23, 2021, from <https://simpd.kemensos.go.id/>
- Solikin, I. (2018). Implementasi E-Modul pada Program Studi Manajemen Informatika Universitas Bina Darma Berbasis Web Mobile. *Jurnal RESTI (Rekayasa Sistem Dan Teknologi Informasi)*, 2(2), 492–497. <https://doi.org/10.29207/resti.v2i2.393>
- Sun, Y., Yuan, T., Chen, J., & Feng, R. (2020, August). Chinese Sign Language Key Action Recognition Based on Extenics Immune Neural Network. *2020 IEEE International Conference on Advances in Electrical Engineering and Computer Applications(AEECA)*. <https://doi.org/10.1109/AEECA49918.2020.9213483>

- Syulistyo, A. R., Hormansyah, D. S., & Saputra, P. Y. (2020). SIBI (Sistem Isyarat Bahasa Indonesia) translation using Convolutional Neural Network (CNN). *IOP Conference Series: Materials Science and Engineering*, 732. <https://doi.org/10.1088/1757-899X/732/1/012082>
- Tan, M., & Le, Q. v. (2021). *EfficientNetV2: Smaller Models and Faster Training*.
- Tolentino, L. K. S., Juan, R. O. S., Thio-ac, A. C., Pamahoy, M. A. B., Forteza, J. R. R., & Garcia, X. J. O. (2019). Static Sign Language Recognition Using Deep Learning. *International Journal of Machine Learning and Computing*, 9(6), 821–827. <https://doi.org/10.18178/ijmlc.2019.9.6.879>
- Wadhawan, A., & Kumar, P. (2020). Deep learning-based sign language recognition system for static signs. *Neural Computing and Applications*, 32(12), 7957–7968. <https://doi.org/10.1007/s00521-019-04691-y>
- World Health Organization. (2021). World report on hearing. *Genova*, 1–272.
- Xiao, Q., Qin, M., Guo, P., & Zhao, Y. (2019). Multimodal Fusion Based on LSTM and a Couple Conditional Hidden Markov Model for Chinese Sign Language Recognition. *IEEE Access*, 7. <https://doi.org/10.1109/ACCESS.2019.2925654>
- Yu, Y., Chen, X., Cao, S., Zhang, X., & Chen, X. (2020). Exploration of Chinese Sign Language Recognition Using Wearable Sensors Based on Deep Belief Net. *IEEE Journal of Biomedical and Health Informatics*, 24(5). <https://doi.org/10.1109/JBHI.2019.2941535>