

DAFTAR PUSTAKA

- ADMINLP2M(Lembaga Penelitian dan Pengabdian Masyarakat Universitas Medan Area). (2023). Algoritma K-Nearest Neighbors (KNN) – Pengertian dan Penerapan. Diakses pada tanggal 14 November 2023, <https://lp2m.uma.ac.id/2023/02/16/algoritma-k-nearest-neighbors-knn-pengertian-dan-penerapan/>
- ADMINLP2M(Lembaga Penelitian dan Pengabdian Masyarakat Universitas Medan Area). (2023). Principal Component Analysis (PCA) – Definisi dan Penjelasannya. Diakses pada tanggal 9 Desember 2023, <https://lp2m.uma.ac.id/2023/06/14/principal-component-analysis-pca-definisi-dan-penjasannya/>
- Adi, Luthfi Satrio. 2022. “Penggunaan *Electronic nose* untuk Klasifikasi Tingkat Roasting Biji Kopi Arabika (*Coffea Arabica*) Tahun 2022”. Skripsi, Universitas Gadjah Mada, 2022.
- Agussationo, Yudhi & Soesanti, Indah. (2015). Ekstraksi Ciri Digital X-RAY Paru Diagnosis Tuberkulosis Berbasis Metode Statistis. Seminar Nasional Aplikasi Teknologi Informasi (SNATi) 2015. Yogyakarta, 6 Juni 2015
- Ajitesh Kumar (2023). PCA Explained Variance Concepts with Python Example. Diakses pada tanggal 28 Desember 2023. <https://vitalflux.com/pca-explained-variance-concept-python-example/>
- A Kholik. (2021). *KLASIFIKASI MENGGUNAKAN CONVOLUTIONAL NEURAL NETWORK (CNN) PADA TANGKAPAN LAYAR HALAMAN INSTAGRAM*. JDMSI, Vol. 2, No. 2, 2021, 10-20, ISSN: 2745-8458
- Balakrishnama, S., & Ganapathiraju, A. (1998). Linear discriminant analysis-a brief tutorial. Institute for Signal and information Processing, 18(1998), 1-8.
- Bhakti, Henny. (2019). Aplikasi Artificial Neural Network (ANN) untuk Memprediksi Masa Studi Mahasiswa Program Studi Teknik Informatika Universitas Muhammadiyah Gresik. Eksplora Informatika. 9. 88-95. 10.30864/eksplora.v9i1.234.
- CampusX. (2022). GoogleColab. <https://colab.research.google.com/drive/1KyMLdV1yB0qVdS-1huxKMN9xVKhrfxGL?usp=sharing>
- Febryananda A R. (2023). Mengenal Metode Klasifikasi Linear Discriminant Analysis (LDA) dalam Analisis Data Multivariat. Departemen Teknik Industri Fakultas Teknik Universitas Brawijaya. Diakses pada tanggal 26 Juni 2023, https://lab_adrk.ub.ac.id/id/mengenal-metode-klasifikasi-linear-discriminant-analysis-lda-dalam-analisis-data-multivariat/
- Gaofeng Chen, Guifang Wu, “Classification of *Electronic nose* Data Using the Least Squares *Support vector machine*,” 2020 *College of Mechanical and*

Electrical Engineering, Inner Mongolia Agricultural University, 306, Zhaowuda Road, Huhhot, 010018, P.R.China.

Gunawan, Indra. (2020). Optimasi Model Artificial Neural Network Untuk Klasifikasi Paket Jaringan. *Simetris Jurnal Teknik Mesin Elektro dan Ilmu Komputer*. 14. 1-5. 10.51901/simetris.v14i2.135.

Hines, E.L., Boilot, P., Gardner, J.W., Gongora, M.A., 2002. Pattern Analysis for *Electronic noses*, in: Handbook of Machine Olfaction. John Wiley & Sons, Ltd, pp. 133–160. <https://doi.org/10.1002/3527601597.ch6>

H. Song, J. Li, W. Wang, Y. Li, L. Zhou, and Y. Li, "Feature extraction based on PCA and clustering analysis for electronic nose," 2017 IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC), Xiamen, 2017, pp. 1-5.

Inca, Inca & Widodo, Triyogatama & Lelono, Danang. (2018). Klasifikasi Teh Hijau dan Teh Hitam Tambi-Pagilaran dengan Metode Principal Component Analysis (PCA) Menggunakan E-Nose. *IJEIS (Indonesian Journal of Electronics and Instrumentation Systems)*. 8. 61. 10.22146/ijeis.28718.

La'ali, Nahda Faiha. 2023. "Detektor Gas Polimer Berbasis *Electronic nose* Menggunakan Metode *Machine learning* Tahun 2023". Skripsi, Universitas Gadjah Mada, 2023.

Laudon, Kenneth C & Jane P, Laudon 2008, Sistem Informasi Manajemen (10th), Jakarta, Salemba.

Marlus Eri Sitohang. 2012. Analisis Sinyal *Electronic nose* Berbasis Wavelet Menggunakan *Support vector machine* Untuk Identifikasi Jenis Teh Hitam. *Jurnal Sistem Komputer - Vol.2* (2012): 9.

Martin T. Hagan, Howard B. Demuth, Mark Hudson Beale, Orlando De Jesús, 2014, Neural Network Design (2th), Martin Hagan, Kansas

MatheusSchaly. (2020). Kernel SVM. Github. [https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine Learning A-Z Hands-On Python %26 R In Data Science/2 Classification/Python/4 Kernel SVM.ipynb](https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine%20Learning%20A-Z%20Hands-On%20Python%20R%20In%20Data%20Science/2%20Classification/Python/4%20Kernel%20SVM.ipynb)

MatheusSchaly. (2020). K-NN. Github. [https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine Learning A-Z Hands-On Python %26 R In Data Science/2 Classification/Python/2 k-NN.ipynb](https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine%20Learning%20A-Z%20Hands-On%20Python%20R%20In%20Data%20Science/2%20Classification/Python/2%20k-NN.ipynb)

MatheusSchaly. (2020). Linear Discriminant Analysis. Github. [https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine Learning A-Z Hands-On Python %26 R In Data Science/8 Dimensionality Reduction/Python /2 Feature Extraction Linear Discriminant Analysis.ipynb](https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine%20Learning%20A-Z%20Hands-On%20Python%20R%20In%20Data%20Science/8%20Dimensionality%20Reduction/Python/2%20Feature%20Extraction%20Linear%20Discriminant%20Analysis.ipynb)

- MatheusSchaly. (2020). Principal Component Analysis. Github. <https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine Learning A-Z Hands-On Python %26 R In Data Science/8 Dimensionality Reduction/Python /1 Feature Extraction Principal Component Analysis.ipynb>
- MatheusSchaly. (2020). SVM. Github. <https://github.com/MatheusSchaly/Online-Courses/blob/master/Machine Learning A-Z Hands-On Python %26 R In Data Science/2 Classification/Python/3 SVM.ipynb>
- Mutaminah, Arina. 2023. "Optimasi K-Nearest Neighbour dengan Ant Colony Optimization untuk klasifikasi aroma biji kopi arabika pada e-nose". Skripsi Universitas Gadjah Mada, 2023.
- Nurhayati, Oky Dwi. (2020). Pengolahan Citra untuk Identifikasi Jenis Telur Ayam Lehorn dan Omega-3 Menggunakan k-Mean Clustering dan Principal Component Analysis. Jurnal Sistem Informasi Bisnis 10.21456/vol10iss1pp84-93
- [Pothuganti, Swathi. \(2018\). Review on over-fitting and under-fitting problems in Machine learning and solutions. International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering. 7. 3692-3695. 10.15662/IJAREEIE.2018.0709015.](#)
- Ritonga, A. S., & Purwaningsih, E. S. (2018). Penerapan Metode *Support vector machine* (SVM) Dalam Klasifikasi Kualitas Pengelasan Smaw (Shield Metal Arc Welding). Ilmiah Edutic, 5(1), 17–25
- Satria Wibawa, Made. (2017). Pengaruh Fungsi Aktivasi, Optimisasi dan Jumlah Epoch Terhadap Performa Jaringan Saraf Tiruan. 10.13140/RG.2.2.21139.94241.
- S. S. Patil, S. S. Shinde, and S. S. Shinde, "Electronic nose: a review," International Journal of Engineering Science and Innovative Technology (IJESIT), vol. 2, no. 6, pp. 216-223, 2013.
- Ulfa, Maria & Haryanto, Haryanto & Aji, Kunto. (2019). Desain Sistem Pengenalan Dan Klasifikasi Kopi Bubuk Bermerek Dengan Menggunakan *Electronic nose* Berbasis Artifical Neural Network (ANN). Jurnal Elektronika, Listrik, Telekomunikasi, Komputer, Informatika, Sistem Kontrol (J-Eltrik). 1. 10.30649/j-eltrik.v1i2.15.
- Widodo, P. P., Handayanto, R. T., Herlawati. (2013). Penerapan Data Mining Dengan Matlab, Bandung, Rekayasa Sains.
- Yan, J., Guo, X., Duan, S., Jia, P., Wang, L., Peng, C., Zhang, S., 2015. *Electronic nose* Feature Extraction Methods: A Review. Sensors 15, 27804–27831. <https://doi.org/10.3390/s151127804>

Yaro'uuf, Dwi Vera. 2022. "Analisis dan Klasifikasi Pola Aroma Kopi Robusta Kabupaten Probolinggo dengan Metode K-Nearest Neighbor Untuk Mengembangkan Prototype E-Nose Tahun 2022". Skripsi, Universitas Jember, 2022.

Ying, Xue. (2019). An Overview of *Overfitting* and its Solutions. Journal of Physics: Conference Series. 1168. 022022. 10.1088/1742-6596/1168/2/022022.