

## DAFTAR PUSTAKA

- [1] Kemendikbud, “Peraturan menteri pendidikan dan kebudayaan nomor 3 tahun 2020 tentang standar nasional pendidikan tinggi,” Kementerian Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia, 2020.
- [2] R. Damayanti, “Analisis kesulitan mahasiswa menyelesaikan skripsi pada situasi pandemi covid 19,” Ph.D. dissertation, UMSU, 2020.
- [3] H. Firdausi, N. Diana, and J. Junaidi, “Pengaruh kinerja dosen pembimbing skripsi terhadap kualitas skripsi mahasiswa (studi kasus pada mahasiswa s1 akuntansi feb unisma),” *e\_Jurnal Ilmiah Riset Akuntansi*, vol. 9, no. 11, 2020.
- [4] R. Adek, “Analisis hubungan kinerja dosen pembimbing skripsi dan kualitas skripsi mahasiswa akuntansi pada universitas pembangunan nasional “veteran” jawa timur,” Ph.D. dissertation, UPN" VETERAN" JAWA TIMUR, 2014.
- [5] J. Jarwati, A. C. Prihandoko *et al.*, “Penerapan algoritma winnowing pada sistem rekomendasi penentuan dosen pembimbing skripsi (studi kasus program studi sistem informasi),” *BERKALA SAINSTEK*, vol. 5, no. 1, pp. 11–20, 2017.
- [6] W. A. Dewa and L. S. Rahmawati, “Analisis dan desain sistem pendukung keputusan penentuan dosen pembimbing tugas akhir menggunakan metode ahp,” *Jurnal Technopreneur (JTech)*, vol. 6, no. 2, pp. 81–88, 2018.
- [7] H. Sitompul, R. Rosnelli, E. Daryanto, N. Sitanggang, and D. Mulyana, “Kualitas dosen dalam pembimbingan skripsi mahasiswa fakultas teknik universitas negeri medan,” *Jurnal Pendidikan Teknologi dan Kejuruan*, vol. 20, no. 1, pp. 24–29, 2018.
- [8] F. N. Fajri, A. Tholib, and W. Yuliana, “Penerapan machine learning untuk penentuan mata kuliah pilihan pada program studi informatika,” *Jurnal Teknik Informatika dan Sistem Informasi p-ISSN*, vol. 2443, p. 2210.
- [9] A. R. Pratama, R. R. Aryanto, and A. T. M. Pratama, “Model klasifikasi calon mahasiswa baru untuk sistem rekomendasi program studi sarjana berbasis machine learning,” *Jurnal Teknologi Informasi dan Ilmu Komputer*, vol. 9, no. 4, pp. 725–734, 2022.
- [10] A. A. B. Arisetiawan, I. Indriati, and D. E. Ratnawati, “Sistem rekomendasi dosen pembimbing berdasarkan dokumen judul skripsi di bidang komputasi cerdas menggunakan metode bm25,” *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, vol. 3, no. 6, pp. 5832–5836, 2019.
- [11] F. Fatayat and R. A. Nugroho, “Analisa penentuan dosen pembimbing tugas akhir mahasiswa menggunakan naive bayes classifier,” *Simtika*, vol. 4, no. 3, pp. 1–7, 2021.
- [12] W. Wang, J. Liu, Z. Yang, X. Kong, and F. Xia, “Sustainable collaborator recommendation based on conference closure,” *IEEE Transactions on Computational Social Systems*, vol. 6, no. 2, pp. 311–322, 2019.

- [13] Y. R. Pradana, A. A. Supianto, and Y. T. Mursityo, "Prediksi bidang penelitian dan rekomendasi dosen pembimbing skripsi berdasarkan konten latar belakang pada naskah proposal menggunakan metode multi-class support vector machine dan weighted product," *Jurnal Teknologi Informasi dan Ilmu Komputer (JTIIK)*, vol. 8, no. 2, 2021.
- [14] A. R. Pratama, R. R. Aryanto, L. Iswari *et al.*, "Studi komparasi model klasifikasi berbasis pembelajaran mesin untuk sistem rekomendasi program studi," *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi)*, vol. 5, no. 5, pp. 853–862, 2021.
- [15] A. IMANUDIN, "Sistem rekomendasi dosen pembimbing skripsi menggunakan metode content-based filtering dan density-based spatial clustering of applications with noise (dbscan)," Ph.D. dissertation, Universitas Gadjah Mada, 2021.
- [16] M. A. Boden, *Artificial intelligence*. Elsevier, 1996.
- [17] R. Luckin, W. Holmes, M. Griffiths, and L. B. Forcier, "Intelligence unleashed: An argument for ai in education," 2016.
- [18] M. I. of Technology School of Management and S. Brown, *Machine learning, explained*. MIT Sloan management, 2021.
- [19] S. Belaidouni and M. Miraoui, "Machine learning technologies in smart spaces," in *Proceedings of the 10th International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, Venice, Italy*, 2016, pp. 9–13.
- [20] P. Cunningham, M. Cord, and S. J. Delany, "Supervised learning," in *Machine learning techniques for multimedia: case studies on organization and retrieval*. Springer, 2008, pp. 21–49.
- [21] S. Ranganathan, K. Nakai, and C. Schonbach, *Encyclopedia of bioinformatics and computational biology: ABC of bioinformatics*. Elsevier, 2018.
- [22] M. Windarti, "Perbandingan kinerja algoritma naïve bayes dan bayesian network dalam klasifikasi masa studi mahasiswa," *PROSIDING SNAST*, pp. 249–260, 2018.
- [23] E. Retnoningsih and R. Pramudita, "Mengenal machine learning dengan teknik supervised dan unsupervised learning menggunakan python," *Bina Insani Ict Journal*, vol. 7, no. 2, pp. 156–165, 2020.
- [24] D. Sartika and D. I. Sensuse, "Perbandingan algoritma klasifikasi naive bayes, nearest neighbour, dan decision tree pada studi kasus pengambilan keputusan pemilihan pola pakaian," *JATISI (Jurnal Teknik Informatika dan Sistem Informasi)*, vol. 3, no. 2, pp. 151–161, 2017.
- [25] X. Wu, V. Kumar, J. Ross Quinlan, J. Ghosh, Q. Yang, H. Motoda, G. J. McLachlan, A. Ng, B. Liu, P. S. Yu *et al.*, "Top 10 algorithms in data mining," *Knowledge and information systems*, vol. 14, pp. 1–37, 2008.
- [26] S. Taheri and M. Mammadov, "Learning the naive bayes classifier with optimization models," *International Journal of Applied Mathematics and Computer Science*, vol. 23, no. 4, pp. 787–795, 2013.

- [27] M. Khashei and M. Bijari, "An artificial neural network (p, d, q) model for time-series forecasting," *Expert Systems with applications*, vol. 37, no. 1, pp. 479–489, 2010.
- [28] G. T. HICHAM, E. A. CHAKER, and E. LOTFI, "The optimization of compute resources scheduling in cloud computing environments using artificial neural networks," *Journal of Theoretical & Applied Information Technology*, vol. 96, no. 13, 2018.
- [29] O. A. Montesinos López, A. Montesinos López, and J. Crossa, "Fundamentals of artificial neural networks and deep learning," in *Multivariate statistical machine learning methods for genomic prediction*. Springer, 2022, pp. 379–425.
- [30] P. Sibi, S. A. Jones, and P. Siddarth, "Analysis of different activation functions using back propagation neural networks," *Journal of theoretical and applied information technology*, vol. 47, no. 3, pp. 1264–1268, 2013.
- [31] I. Goodfellow, Y. Bengio, and A. Courville, *Deep learning*. MIT press, 2016.
- [32] L. Shen, Q. Zhang, G. Cao, and H. Xu, "Fall detection system based on deep learning and image processing in cloud environment," in *Complex, Intelligent, and Software Intensive Systems: Proceedings of the 12th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2018)*. Springer, 2019, pp. 590–598.
- [33] K. Dey, K. Bajaj, K. Ramalakshmi, S. Thomas, and S. Radhakrishna, "Fishhook—an optimized approach to marine specie classification using mobilenetv2," *arXiv preprint arXiv:2304.01524*, 2023.
- [34] K. Janocha and W. M. Czarnecki, "On loss functions for deep neural networks in classification," *arXiv preprint arXiv:1702.05659*, 2017.
- [35] J. D. Kelleher, *Deep learning*. MIT press, 2019.
- [36] H. Liang, X. Sun, Y. Sun, and Y. Gao, "Text feature extraction based on deep learning: a review," *EURASIP journal on wireless communications and networking*, vol. 2017, no. 1, pp. 1–12, 2017.
- [37] "Applications of deep learning techniques for pedestrian detection in smart environments: a comprehensive study," *Journal of advanced transportation*, vol. 2021, pp. 1–14, 2021.
- [38] Y. Bengio, Y. Lecun, and G. Hinton, "Deep learning for ai," *Communications of the ACM*, vol. 64, no. 7, pp. 58–65, 2021.
- [39] J. Chan Phooi M'ng and M. Mehralizadeh, "Forecasting east asian indices futures via a novel hybrid of wavelet-pca denoising and artificial neural network models," *PloS one*, vol. 11, no. 6, p. e0156338, 2016.
- [40] J. Schmidhuber, S. Hochreiter *et al.*, "Long short-term memory," *Neural Comput*, vol. 9, no. 8, pp. 1735–1780, 1997.

- [41] A. Graves, M. Liwicki, S. Fernández, R. Bertolami, H. Bunke, and J. Schmidhuber, "A novel connectionist system for unconstrained handwriting recognition," *IEEE transactions on pattern analysis and machine intelligence*, vol. 31, no. 5, pp. 855–868, 2008.
- [42] F. A. Gers, J. Schmidhuber, and F. Cummins, "Learning to forget: Continual prediction with lstm," *Neural computation*, vol. 12, no. 10, pp. 2451–2471, 2000.
- [43] C. Jiang, Y. Chen, S. Chen, Y. Bo, W. Li, W. Tian, and J. Guo, "A mixed deep recurrent neural network for mems gyroscope noise suppressing," *Electronics*, vol. 8, no. 2, p. 181, 2019.
- [44] A. M. NUGROHO, "Keterangan gambar otomatis berbahasa indonesia menggunakan cnn dan lstm dengan attention halaman judul," 2021.
- [45] R. Mohammed, J. Rawashdeh, and M. Abdullah, "Machine learning with oversampling and undersampling techniques: overview study and experimental results," in *2020 11th international conference on information and communication systems (ICICS)*. IEEE, 2020, pp. 243–248.
- [46] A. Vilorio, O. B. P. Lezama, and N. Mercado-Caruzo, "Unbalanced data processing using oversampling: machine learning," *Procedia Computer Science*, vol. 175, pp. 108–113, 2020.
- [47] T. Jo, *Text mining*. Springer, 2019, vol. 45.
- [48] I. W. Saputro and B. W. Sari, "Uji performa algoritma naïve bayes untuk prediksi masa studi mahasiswa," *Creative Information Technology Journal*, vol. 6, no. 1, pp. 1–11, 2020.
- [49] A. Aizawa, "An information-theoretic perspective of tf-idf measures," *Information Processing & Management*, vol. 39, no. 1, pp. 45–65, 2003.
- [50] H. C. Wu, R. W. P. Luk, K. F. Wong, and K. L. Kwok, "Interpreting tf-idf term weights as making relevance decisions," *ACM Transactions on Information Systems (TOIS)*, vol. 26, no. 3, pp. 1–37, 2008.
- [51] S. Andayani and A. Ryansyah, "Implementasi algoritma tf-idf pada pengukuran kesamaan dokumen," *JuSiTik J. Sist. dan Teknol. Inf. Komun*, vol. 1, no. 1, p. 53, 2017.
- [52] B. Santosa and A. Umam, *Data Mining dan Big Data Analytics: Teori dan Implementasi Menggunakan Python & Apache Spark*. Penebar Media Pustaka, 2018.
- [53] H. Azis, P. Purnawansyah, F. Fattah, and I. P. Putri, "Performa klasifikasi k-nn dan cross validation pada data pasien pengidap penyakit jantung," *ILKOM Jurnal Ilmiah*, vol. 12, no. 2, pp. 81–86, 2020.
- [54] Y. Liu, S. Yang *et al.*, "Application of decision tree-based classification algorithm on content marketing," *Journal of Mathematics*, vol. 2022, 2022.
- [55] E. Alpaydin, *Introduction to machine learning*. MIT press, 2020.

- [56] G. VanRossum and F. L. Drake, *The python language reference*. Python Software Foundation Amsterdam, Netherlands, 2010, vol. 561.
- [57] A. Sharma, F. Khan, D. Sharma, S. Gupta, and F. Student, "Python: the programming language of future," *Int. J. Innovative Res. Technol*, vol. 6, no. 2, pp. 115–118, 2020.
- [58] B. Riyanto *et al.*, "Sistem informasi pencarian lowongan kerja menggunakan web scraping dan pembobotan kata tf-idf," Ph.D. dissertation, STMIK AKAKOM Yogyakarta, 2018.
- [59] B. Zhao, "Web scraping," *Encyclopedia of big data*, vol. 1, 2017.
- [60] A. Chapagain, *Hands-On Web Scraping with Python: Perform advanced scraping operations using various Python libraries and tools such as Selenium, Regex, and others*. Packt Publishing Ltd, 2019.
- [61] A. Géron, *Hands-on machine learning with Scikit-Learn, Keras, and TensorFlow*. "O'Reilly Media, Inc.", 2022.
- [62] L. F. Coletta, N. F. da Silva, E. R. Hruschka, and E. R. Hruschka, "Combining classification and clustering for tweet sentiment analysis," in *2014 Brazilian conference on intelligent systems*. IEEE, 2014, pp. 210–215.
- [63] P. Arabie, L. Hubert, and G. De Soete, *Clustering and classification*. World Scientific, 1996.
- [64] A. Hermanto, "Implementasi text mining menggunakan naive bayes untuk penentuan kategori tugas akhir mahasiswa berdasarkan abstraksinya," *Teknik Informatika Universitas*, vol. 17, 2016.
- [65] V. L. Parsons, "Stratified sampling," *Wiley StatsRef: Statistics Reference Online*, pp. 1–11, 2014.
- [66] M. R. Faisal, D. T. Nugrahadhi *et al.*, "Studi ekstraksi fitur berbasis vektor word2vec pada pembentukan fitur berdimensi rendah," *Jurnal Komputasi*, vol. 8, no. 1, pp. 62–69, 2020.
- [67] D. Berrar *et al.*, "Cross-validation." 2019.
- [68] K. Ghosh, A. Banerjee, S. Chatterjee, and S. Sen, "Imbalanced twitter sentiment analysis using minority oversampling," in *2019 IEEE 10th international conference on awareness science and technology (iCAST)*. IEEE, 2019, pp. 1–5.
- [69] D. P. Kingma and J. Ba, "Adam: A method for stochastic optimization," *arXiv preprint arXiv:1412.6980*, 2014.
- [70] M. Z. Alom, T. M. Taha, C. Yakopcic, S. Westberg, P. Sidike, M. S. Nasrin, B. C. Van Esesn, A. A. S. Awwal, and V. K. Asari, "The history began from alexnet: A comprehensive survey on deep learning approaches," *arXiv preprint arXiv:1803.01164*, 2018.

- [71] A. Y. Prathama, "Pendekatan ann (artificial neural network) untuk penentuan prosentase bobot pekerjaan dan estimasi nilai pekerjaan struktur pada rumah sakit pertama," *Jurnal Teknosains*, vol. 7, no. 1, pp. 14–25, 2018.
- [72] A. Nirmala, A. Prasad, D. Babu *et al.*, "Predictive analysis of unemployment rate using machine learning techniques," in *2023 IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS)*. IEEE, 2023, pp. 1–5.
- [73] Y.-c. Wu and J.-w. Feng, "Development and application of artificial neural network," *Wireless Personal Communications*, vol. 102, pp. 1645–1656, 2018.
- [74] J. K. Lubis and I. Kharisudin, "Metode long short term memory dan generalized autoregressive conditional heteroscedasticity untuk pemodelan data saham," in *PRISMA, Prosiding Seminar Nasional Matematika*, vol. 4, 2021, pp. 652–658.
- [75] N. Srivastava, G. Hinton, A. Krizhevsky, I. Sutskever, and R. Salakhutdinov, "Dropout: a simple way to prevent neural networks from overfitting," *The journal of machine learning research*, vol. 15, no. 1, pp. 1929–1958, 2014.
- [76] Z. Efendi and M. Mustakim, "Text mining classification sebagai rekomendasi dosen pembimbing tugas akhir program studi sistem informasi," in *Seminar Nasional Teknologi Informasi Komunikasi dan Industri*, 2017, pp. 235–242.