

Daftar Pustaka

- [1] D. Sun, W. Gao, H. Hu, and S. Zhou, "Why 90% of clinical drug development fails and how to improve it?," *Acta Pharm. Sin. B*, vol. 12, no. 7, pp. 3049–3062, Jul. 2022, doi: 10.1016/j.apsb.2022.02.002.
- [2] H. Dowden and J. Munro, "Trends in clinical success rates and therapeutic focus," *Nat. Rev. Drug Discov.*, vol. 18, no. 7, pp. 495–496, Jul. 2019, doi: 10.1038/d41573-019-00074-z.
- [3] Y. Wu and G. Wang, "Machine Learning Based Toxicity Prediction: From Chemical Structural Description to Transcriptome Analysis," *Int. J. Mol. Sci.*, vol. 19, no. 8, Art. no. 8, Aug. 2018, doi: 10.3390/ijms19082358.
- [4] A. Cherkasov *et al.*, "QSAR Modeling: Where Have You Been? Where Are You Going To?," *J. Med. Chem.*, vol. 57, no. 12, pp. 4977–5010, Jun. 2014, doi: 10.1021/jm4004285.
- [5] K.-T. Rim, "In silico prediction of toxicity and its applications for chemicals at work," *Toxicol. Environ. Health Sci.*, vol. 12, no. 3, pp. 191–202, Sep. 2020, doi: 10.1007/s13530-020-00056-4.
- [6] K. Jaganathan, H. Tayara, and K. T. Chong, "Prediction of Drug-Induced Liver Toxicity Using SVM and Optimal Descriptor Sets," *Int. J. Mol. Sci.*, vol. 22, no. 15, Art. no. 15, Jan. 2021, doi: 10.3390/ijms22158073.
- [7] S. Zhou *et al.*, "A prediction model of drug-induced ototoxicity developed by an optimal support vector machine (SVM) method," *Comput. Biol. Med.*, vol. 51, pp. 122–127, Aug. 2014, doi: 10.1016/j.combiomed.2014.05.005.
- [8] D.-S. Cao *et al.*, "In silico toxicity prediction of chemicals from EPA toxicity database by kernel fusion-based support vector machines," *Chemom. Intell. Lab. Syst.*, vol. 146, pp. 494–502, Aug. 2015, doi: 10.1016/j.chemolab.2015.07.009.
- [9] C.-F. Chao and M.-H. Horng, "The Construction of Support Vector Machine Classifier Using the Firefly Algorithm," *Comput. Intell. Neurosci.*, vol. 2015, no. 1, p. 212719, 2015, doi: 10.1155/2015/212719.
- [10] C. N. Cavasotto and V. Scardino, "Machine Learning Toxicity Prediction: Latest Advances by Toxicity End Point," *ACS Omega*, vol. 7, no. 51, pp. 47536–47546, Dec. 2022, doi: 10.1021/acsomega.2c05693.
- [11] I. Fister, I. Fister, X.-S. Yang, and J. Brest, "A comprehensive review of firefly algorithms," *Swarm Evol. Comput.*, vol. 13, pp. 34–46, Dec. 2013, doi: 10.1016/j.swevo.2013.06.001.
- [12] X.-S. Yang and X. He, "Firefly algorithm: recent advances and applications," *Int. J. Swarm Intell.*, Aug. 2013, Accessed: May 09, 2024. [Online]. Available: <https://www.inderscienceonline.com/doi/10.1504/IJSI.2013.055801>
- [13] X.-S. Yang, *Nature-inspired metaheuristic algorithms*. Luniver press, 2010. Accessed: Jan. 06, 2025. [Online]. Available: https://books.google.com/books?hl=en&lr=&id=iVB_ETlh4ogC&oi=fnd&pg=PR5&dq=Nature-inspired+metaheuristic+algorithms&ots=DydzneFFti&sig=RCKDeW60lw2CvsKietVMJ9GiopI
- [14] J. W. Harahap, F. Nhita, and I. Kurniawan, "Microarray-Based Classification Model of Parkinson Identification by using Firefly Algorithm-Support Vector Machine," in *2022 10th International Conference on Information and Communication Technology (ICoICT)*, Aug. 2022, pp. 17–22. doi: 10.1109/ICoICT55009.2022.9914897.
- [15] D. A. Pisner and D. M. Schnyer, "Support vector machine," in *Machine Learning*, Elsevier, 2020, pp. 101–121. doi: 10.1016/B978-0-12-815739-8.00006-7.
- [16] S. Suthaharan, "Support Vector Machine," in *Machine Learning Models and Algorithms for Big Data Classification: Thinking with Examples for Effective Learning*, S. Suthaharan, Ed., Boston, MA: Springer US, 2016, pp. 207–235. doi: 10.1007/978-1-4899-7641-3_9.
- [17] C. Campbell, "Chapter 7 An Introduction to Kernel Methods".
- [18] V. Hooshmand Moghaddam and J. Hamidzadeh, "New Hermite orthogonal polynomial kernel and combined kernels in Support Vector Machine classifier," *Pattern Recognit.*, vol. 60, pp. 921–935, Dec. 2016, doi: 10.1016/j.patcog.2016.07.004.
- [19] B.-C. Kuo, H.-H. Ho, C.-H. Li, C.-C. Hung, and J.-S. Taur, "A Kernel-Based Feature Selection Method for SVM With RBF Kernel for Hyperspectral Image Classification," *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, vol. 7, no. 1, pp. 317–326, Jan. 2014, doi: 10.1109/JSTARS.2013.2262926.
- [20] T. Hofmann, B. Schölkopf, and A. J. Smola, "Kernel methods in machine learning," *Ann. Stat.*, vol. 36, no. 3, Jun. 2008, doi: 10.1214/009053607000000677.
- [21] D. Weininger, "SMILES, a chemical language and information system. 1. Introduction to methodology and encoding rules," *J. Chem. Inf. Comput. Sci.*, vol. 28, no. 1, pp. 31–36, Feb. 1988, doi: 10.1021/ci00057a005.
- [22] B. Venkatesh and J. Anuradha, "A Review of Feature Selection and Its Methods," *Cybern. Inf. Technol.*, vol. 19, no. 1, pp. 3–26, Mar. 2019, doi: 10.2478/cait-2019-0001.
- [23] M. Dash and H. Liu, "Feature Selection for Classification".
- [24] A. V. Artemov, E. Putin, Q. Vanhaelen, A. Aliper, I. V. Ozerov, and A. Zhavoronkov, "Integrated deep learned transcriptomic and structure-based predictor of clinical trials outcomes," Dec. 20, 2016. doi:

10.1101/095653.

- [25] K. M. Gayvert, N. S. Madhukar, and O. Elemento, “A Data-Driven Approach to Predicting Successes and Failures of Clinical Trials,” *Cell Chem. Biol.*, vol. 23, no. 10, pp. 1294–1301, Oct. 2016, doi: 10.1016/j.chembiol.2016.07.023.
- [26] P. A. Novick, O. F. Ortiz, J. Poelman, A. Y. Abdulhay, and V. S. Pande, “SWEETLEAD: an In Silico Database of Approved Drugs, Regulated Chemicals, and Herbal Isolates for Computer-Aided Drug Discovery,” *PLoS ONE*, vol. 8, no. 11, p. e79568, Nov. 2013, doi: 10.1371/journal.pone.0079568.