

REFERENCES

- [1] M. M. Reza, "Segmentation of Mobile Customers using Data Mining Techniques," *International Journal of Engineering Research* and vol. 7, no. 10, 2018.
- [2] H. Chen, L. Zhang, X. Chu, and B. Yan, "Smartphone customer segmentation based on the usage pattern," *Advanced Engineering Informatics*, vol. 42, p. 101000, 2019.
- [3] J. Kwac, C.-W. Tan, N. Sintov, J. Flora, and R. Rajagopal, "Utility Customer Segmentation Based on Smart Meter Data: Empirical Study," in *2013 IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Vancouver, BC, Canada, 2013, pp. 102-107.
- [4] M. M. Reza, "Segmentation of Mobile Customers using Data Mining Techniques," *International Journal of Engineering Research* and vol. 7, no. 10, 2018.
- [5] C. Naik, A. Kharwar, and N. Desai, "A Review: RFM Approach on Different Data Mining Techniques," *ISSN 2250-2459, ISO 9001:2008 Certified Journal*, vol. 3, no. 10, pp. 1-6, Oct. 2013.
- [6] P. Bunnak, S. Thammaboosadee, and S. Kiattisin, "Applying Data Mining Techniques and Extended RFM Model in Customer Loyalty Measurement," *Journal of Advances in Information Technology*, pp. 238-242, 2015.
- [7] S. Masood, M. Ali, F. Arshad, A. M. Qamar, A. Kamal, and A. Rehman, "Customer segmentation and analysis of a mobile telecommunication company of Pakistan using two phase clustering algorithms," in *Eighth International Conference on Digital Information Management (ICDIM 2013)*, 2013.
- [8] A. Hiziroglu, "A neuro-fuzzy two-stage clustering approach to customer segmentation," *Journal of Marketing Analytics*, vol. 1, no. 4, pp. 202-221, 2013.
- [9] Z. Yao, P. Sarlin, T. Eklund, and B. Back, "Combining visual customer segmentation and response modeling," *Neural Computing and Applications*, vol. 25, no. 1, pp. 123-134, 2013.
- [10] M. Alborzi and M. Khanbabaei, "Using data mining and neural networks techniques to propose a new hybrid customer behaviour analysis and credit scoring model in banking services based on a developed RFM analysis method," *Int. J. Business Information Systems*, vol. 23, no. 1, pp. 1-22, 2016.
- [11] S. Wang, "Research on optimization model of bank credit strategy," in *School of Medical Imaging, Hangzhou Medical College, Hangzhou, China*, 310000.
- [12] T. Qu et al., "Demand Prediction and Price Optimization for Semi-Luxury Supermarket Segment," *Computers & Industrial Engineering*, vol. 113, pp. 482-494, 2017.
- [13] K. J. Ferreira, B. H. A. Lee, and D. Simchi-Levi, "Analytics for an Online Retailer: Demand Forecasting and Price Optimization," *Manufacturing & Service Operations Management*, vol. 17, no. 1, pp. 28-44, 2015.

- [14] P. Ye et al., "Customized Regression Model for Airbnb Dynamic Pricing," in 2018 IEEE 10th International Conference on Communication Software and Networks (ICCSN), Chengdu, China, 2018, pp. 19-23.
- [15] P. B. Mullen et al., "Particle Swarm Optimization in Dynamic Pricing," in 2006 IEEE Congress on Evolutionary Computation, Vancouver, BC, Canada, 2006, pp. 2192-2199.
- [16] S. Sohn, K. Lim, and Y. Ju, "Optimization strategy of credit line management for credit card business," *Computers & Operations Research*, vol. 48, pp. 81-88, 2014.
- [17] A. Pallegedara and R. C. Gopura, "AI Based Approach of Predicting the Credit Limits of Users to Middle Customer based Mobile Communication Services," in 2018 IEEE 13th International Conference on Industrial and Information Systems (ICIIS), Kandy, Sri Lanka, 2018, pp. 216-221.
- [18] C. Subbalakshmi et al., "A method to find optimum number of clusters based," in 2016 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), Chennai, India, 2016, pp. 1-6.
- [19] A. Tharwat, "Classification assessment methods," *Applied Computing and Informatics*, vol. 17, no. 1, pp. 168-192, 2021.
- [20] N. Seth, "Beginners Guide to Anomaly Detection Using Self-organizing maps," *Analytics Vidhya*, Sep. 2021. [Online]. Available: <https://www.analyticsvidhya.com/blog/2021/09/beginners-guide-to-anomaly-detection-using-self-organizing-maps/>. [Accessed: Jan. 29, 2023].
- [21] A. Smiti, "A critical overview of outlier detection methods," *Computer Science Review*, vol. 38, 2020.
- [22] E. N. Nasibov and G. Ulutagay, "Robustness of density-based clustering methods with various neighborhood relations," *Fuzzy Sets and Systems*, vol. 160, no. 24, pp. 3601-3615, 2009.
- [23] A. Shalaginov and K. Franke, "A New Method for an Optimal SOM Size Determination in Neuro-Fuzzy for the Digital Forensics Applications," in *IEEE Access*, vol. 8, pp. 164337-164346, 2020.
- [24] A. Muñoz and J. Muruzábal, "Self-organizing maps for outlier detection," *Neurocomputing*, vol. 18, no. 1-3, pp. 33-60, 1998.
- [25] M. Vaghefi, K. Mahmoodi, and M. Akbari, "A Comparison among Data Mining Algorithms for Outlier Detection using Flow Pattern Experiments," *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, vol. 41, no. 1, pp. 129-142, 2017.
- [26] R. Coelho, "Knowledge discovery in data mining," in *Handbook of Research on Text and Web Mining Technologies*, A. Gelbukh (Ed.), Hershey, PA: IGI Global, 2008, pp. 272-284. [Online]. Available: <https://www.igi-global.com/chapter/knowledge-discovery-data-mining/24909>.

- [27] M. Partridge and R. A. Calvo, "Simple principal components analysis for high-dimensional image databases," *Intelligent Data Analysis*, vol. 2, no. 3, pp. 203-214, Jul. 1998
- [28] B. M. Salih Hasan and A. M. Abdulazeez, "A Review of Principal Component Analysis Algorithm for Dimensionality Reduction", *jscdm*, vol. 2, no. 1, pp. 20–30, Apr. 2021
- [29] S. Mian, S. Khan, M. Nazir, A. Khaliq, M. Ahmad, and S. Rizwan, "Optimization of machining parameters for sustainable manufacturing using hybrid non-dominated sorting genetic algorithm and principal component analysis," *Procedia Manufacturing*, vol. 34, pp. 448-455, 2019.
- [30] L.-L. Li, "A review on classification algorithms in data mining," 2002. [Online]. Available: <https://www.semanticscholar.org/paper/A-Review-on-Classification-Algorithms-in-Data-Mining-Li/0c0e7f90556b01b2127ad4d29cc4d4a3ac725d68>. [Accessed: 2023-01-18].
- [31] B. Raskutti and C. Leckie, "An Evaluation of Criteria for Measuring the Quality of Clusters," Telstra Research Laboratories, 770 Blackburn Rd, Clayton, Victoria 3168, Australia, 2000. [Online]. Available: <https://www.aaai.org/Papers/ICML/2000/ICML00-055.pdf>. [Accessed: 08-January-2023]
- [32] A. Alfaloujeh, A. AlEroud and A. Almulhem, "A Hybrid Data Mining Approach for Intrusion Detection System using Improved C4.5 and PCA Methods," 2015 IEEE/ACS 12th International Conference of Computer Systems and Applications (AICCSA), Marrakech, 2015, pp. 1-6
- [33] A. R. Khot, S. P. Narote and R. S. Bichkar, "Intrusion Detection System Using Data Mining Techniques," 2013 International Conference on Communication Systems and Network Technologies, Rajkot, 2013, pp. 751-756.
- [34] D. T. Dinh, T. Fujinami and V. N. Huynh, "Estimating the Optimal Number of Clusters in Categorical Data Clustering by Silhouette Coefficient," in *Communications in Computer and Information Science*, vol. 1103, 2019, pp. 93-107,
- [35] Huang, Z., 2019. A quick guide to clustering analysis. In *Clustering Analysis* (pp. 1-27). Springer, Cham.
- [36] J. Wei, S. Lin, and C. Weng, "A case study of applying rfm model in market segmentation of children dental clinic," *Expert Syst. Appl.*, vol. 39, pp. 5529-5533, 2012.
- [37] S. Jayasree, S. Saha, J. Mukherjee, "CNAK: Clustering number assisted K-means," *Pattern Recognition*, vol. 110, pp. 107625, 2021.
- [38] H-H Wu, En-Chi, and C-F Lo. "Applying rfm model and k-means method in customer value analysis of an outfitter." In *International Conference on Concurrent Engineering*, New York, 2009.
- [39] Kusumo, H. S., Sudiro, A. M., & Martono, T. R. (2019). The Effect of Stabilizer Type and Concentration on the Stability of Biodiesel. *IOP Conference Series: Materials Science and Engineering*, 569(5), 052024.
- [40] Panigrahi, B. K., & Baliarsingh, P. (2016). Optimized design of power quality conditioner using neural network tuned fuzzy logic controller for voltage sag compensation. 2016

International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), 727-732.

[41] Kamarudin, L. M., Ahmad, N. A., & Shafie, A. A. (2016). Modified random weight neural network algorithm for classification of imbalanced data. *Journal of Telecommunication, Electronic and Computer Engineering*, 8(5), 67-71.

[42] M. Jafarzadegan, F. Safi-Esfahani, and Z. Beheshti, "Combining hierarchical clustering approaches using the PCA method," *Expert Systems with Applications*, vol. 137, pp. 1-10, 2019.

[43] Day WH, Edelsbrunner H. Efficient algorithms for agglomerative hierarchical clustering methods. *Journal of classification*. 1984 Dec;1(1):7-24.

[44] K. Sasirekha and P. Baby, "Agglomerative hierarchical clustering algorithm-a," *International Journal of Scientific and Research Publications*, vol. 3, no. 3, pp. 1-5, March 2013.

[45] C. Ruiz, M. Spiliopoulou, and E. Menasalvas, "C-dbscan: Density-based clustering with constraints," in *Rough Sets, Fuzzy Sets, Data Mining and Granular Computing: 11th International Conference, RSFDGrC 2007, Toronto, Canada, May 14-16, 2007. Proceedings 11*, Springer Berlin Heidelberg, 2007, pp. 216-223.

[46] Y. Eren, I. B. Küçükdemiral, and I. Üstoğlu, "Chapter 2 - Introduction to Optimization," in *Optimization in Renewable Energy Systems*, O. Erdinç (Ed.), Butterworth-Heinemann, 2017, pp. 27-74, ISBN 9780081010419.

[47] V. Savsani, R.V. Rao, and D.P. Vakharia, "Optimal weight design of a gear train using particle swarm optimization and simulated annealing algorithms," *Journal Name (italicized)*, vol. 45, pp. 531-541, 2010.

[48] M. Klinkowski and K. Walkowiak, "A Simulated Annealing Heuristic for a Branch and Price-Based Routing and Spectrum Allocation Algorithm in Elastic Optical Networks," in *Lecture Notes in Computer Science*, vol. 9375, pp. 290-299, 2015.

[49] Y. Aoki, H. Ito, C. Ninagawa, and J. Morikawa, "Smart grid real-time pricing optimization control with simulated annealing algorithm for office building air-conditioning facilities," *2018 IEEE International Conference on Industrial Technology (ICIT)*, Lyon, France, 2018, pp. 1308-1313.

[50] U. Agrawal, D. Soria, C. Wagner, J. Garibaldi, I. O. Ellis, J. M. S. Bartlett, D. Cameron, E. A. Rakha, and A. R. Green, "Combining clustering and classification ensembles: A novel pipeline to identify breast cancer profiles," *Artificial Intelligence in Medicine*, vol. 97, pp. 27-37, 2019. ISSN 0933-3657.

[51] T. Chakraborty, "EC3: Combining Clustering and Classification for Ensemble Learning," *2017 IEEE International Conference on Data Mining (ICDM)*, New Orleans, LA, USA, 2017, pp. 781-786

[52] A. Kyriakopoulou and T. Kalamboukis, "Combining clustering with classification for spam detection in social bookmarking systems," in Proceedings of The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases Discovery Challenge (ECML/PKDD RSDC'08), September 2008, pp. 47-54