IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, December 2022
Impact Factor: 6.252

Identification of Significant Features and Data Mining Techniques in Predicting Heart Stroke

Vikram Gude[1], Saravanan V[2], Iswarya RJ[3], Sathya M[4]
Assistant Professor, Department of Computer Science and Engineering[1,2,3,4.]
Malla Reddy Institute of Technology and Science, Hyderabad, India[1]
Mount Zion College of Engineering and Technology, Lena Vilakku, Pudukkottai, Tamil Nadu, India[2,3,4]

Abstract: *The health-care industry generates a large amount of data, which is processed using certain methodologies. One technique that is frequently utilized is data mining. Heart disease is the leading cause of death on a global scale. This system foresees the risk of heart disease developing. The results of this system give you a % likelihood of getting heart disease. Medical parameters are utilized to categories the datasets. This system uses a data mining classification algorithm to analyze such parameters. The datasets are processed in Python programming using two main Machine Learning Algorithms: Decision Tree Approach and Naïve Bayes Algorithm, with the latter showing to be the best algorithm in terms of heart disease accuracy.*

Keywords: Market Equilibrium, Fisher Market, Algorithmic game theory, Edge computing, Fog computing

REFERENCES

[1]. M. M. Rahman and D. N. Davis, Addressing the class imbalance problem in medical datasets, International Journal of Machine Learning and Computing, Vol.3, No.2, 2013.
[2]. H. L. Yin and T. Y. Leong, A model driven approach to imbalanced data Sampling in medical decision making, Stud Health Techno Inform. 2010; 160(Pt 2):856-60.
[3]. Q. GU, Z. Cai, L. Zhu & B. Huang, data mining on imbalanced data sets, International Conference on Advanced Computer Theory and Engineering, 2008.
[4]. V. Ganganwar, An overview of classification algorithms for imbalanced Datasets, International Journal of Emerging Technology and Advanced Engineering, vol.2, issue 4 2012
[5]. K. Kumar and Abhishek, Artificial Neural Networks for Diagnosis ofKidney Stones Disease, I.J. Information Technology and Computer Science, 7, 20-25, 2012
[6]. H. Yan, Y. Jiang, J. Zheng, C. Peng, Q. Li "A multilayer perceptron based Medical decision support system for heart disease diagnosis" Expert Systems with Applications, vol.30, pp.272-281, 2006
[7]. L.S. Thota, S.B. Changalasetty, Optimum learning rate for classification Problem with MLP in data mining, International Journal of Advances in Engineering & Technology, vol.6, issue.1, pp.35-44, March 2013.
[8]. H.M. Nguyen, E.W. Cooper, K. Kamei, A comparative study on sampling Techniques for handling class imbalance in streaming data, SCIS-ISIS 2012
[9]. C.V. Krishna Veni, T. R. Shoba, On the classification of imbalancedDatasets, International Journal of Computer Science & Technology 20112:145-148.
[10]. P. S. Ratnoo a comparative study of instance reduction techniques. IntJournal of Advances in Engineering Sciences 2013; 3(3).
[11]. I.H. Witten, E. Frank, Data Mining: Practical Machine Learning Tool and Technique with Java Implementation. Morgan Kaufmann; 2000
[12]. H. Haibo & E.A. Garcia, Learning from imbalanced data. IEEE Transaction on knowledge and data engineering 2009; 21; 9: 1293-1284.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, December 2022
Impact Factor: 6.252

[13]. R.O. Duda, P.E. Hart & D.G. Stork, Pattern classification, NewYork: Wiley, 2001.
[14]. C.M. Bishop, Neural networks for pattern recognition, OxfordOxford University Press, 1995.
[15]. S. Shigetoshi, F. Toshio & S. Takanori, A neural network architecture forIncremental learning, Neuro computing, 9,111-130, 1995.
[16]. J.S.R. Jang, C.T. Sun & E. Mizutani, Neuro-fuzzy and soft computing USA, Prentice Hall, 1997.
[17]. N. Baba, A new approach for finding the global minimum of error Function for neural networks, Neural Networks, 2,367-373, 1989.
[18]. L. Mena, J.A. Gonzalez Machine learning for imbalanced Datasets: applications in medical diagnostic, AAAI, 2006
[19]. T.D.Noia,V.C.Ostuni,F.Pesce,G.Binetti,D.Naso,F.P.Schena,E.D.SciascoAn end stage kidney disease predictor based on an artificial neuralNetworks ensemble, Expert Systems with Applications, vol.40, pp.4438-4445, 2013
[20]. E.U. Kuçuksille, R. Selbas, A. Şencan, Prediction of thermo dynamic Properties of refrigerants using data mining. Energy conversion and Management 2011; 52: 836-848.
[21]. Jaganathan, M., Sabari, A. An heuristic cloud based segmentation technique using edge and texture based two dimensional entropy. Cluster Computing Vol 22, PP 12767–12776(2019). https://doi.org/10.1007/s10586-018-1757-3
[22]. Senthil kumar, V., Prasanth, K. Weighted Rendezvous Planning on Q-Learning Based Adaptive Zone Partition with PSO Based Optimal Path Selection. Wireless Personal Communications 110, 153–167 (2020). https://doi-org.libproxy.viko.lt /10.1007/s11277-019-06717-z.
[23]. Vignesh Janarthanan, A.Viswanathan, M. Umamaheswari, "Neural Network and Cuckoo Optimization Algorithm for Remote Sensing Image Classification ", International Journal of Recent Technology and Engineering., vol. 8, no. 4, pp. 1630-1634, Jun. 2019.
[24]. Dr. V. Senthil kumar, Mr. P. Jeevanantham, Dr. A. Viswanathan, Dr. Vignesh Janarthanan, Dr. M. Umamaheswari, Dr. S. Sivaprakash Emperor Journal of Applied Scientific Research "Improve Design and Analysis of Friend-to-Friend Content Dissemination System "Volume - 3 Issue - 3 2021
[25]. V.Senthilkumar , K.Prashanth" A Survey of Rendezvous planning Algorithms for Wireless Sensor Networks International Journal of communication and computer Technologies, Vol 4 Issue No 1 (2016)
[26]. Dr.Vignesh Janarthanan, Dr.Venkata Reddy Medikonda,. Er. Dr. G.Manoj Someswar Proposal of a Novel Approach for Stabilization of the Image from Omni-Directional System in the case of Human Detection & Tracking "American Journal of Engineering Research (AJER)" vol 6 issue 11 2017
[27]. Sowmitha, V., and Mr V. Senthilkumar. "A Cluster Based Weighted Rendezvous Planning for Efficient Mobile-Sink Path Selection in WSN." International Journal for Scientific Research & Development Vol 2 Issue 11 2015
[28]. Viswanathan, A., Arunachalam, V. P., & Karthik, S. (2012). Geographical division traceback for distributed denial of service. Journal of Computer Science, 8(2), 216.
[29]. Anurekha, R., K. Duraiswamy, A. Viswanathan, V.P. Arunachalam and K.G. Kumar et al., 2012. Dynamic approach to defend against distributed denial of service attacks using an adaptive spin lock rate control mechanism. J. Comput. Sci., 8: 632-636.
[30]. Umamaheswari, M., & Rengarajan, N. (2020). Intelligent exhaustion rate and stability control on underwater wsn with fuzzy based clustering for efficient cost management strategies. Information Systems and e-Business Management, 18(3), 283-294.
[31]. Babu, G., & Maheswari, M. U. (2014). Bandwidth Scheduling for Content Delivery in VANET. International Journal of Innovative Research in Computer and Communication Engineering IJIRCCE, 2(1), 1000-1007.
[32]. Viswanathan, A., Kannan, A. R., & Kumar, K. G. (2010). A Dynamic Approach to defend against anonymous DDoS flooding Attacks. International Journal of Computer Science & Information Security.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, December 2022
Impact Factor: 6.252

[33]. Kalaivani, R., & Viswanathan, A. HYBRID CLOUD SERVICE COMPOSITION MECHANISM WITH SECURITY AND PRIVACY FOR BIG DATA PROCESS., International Journal of Advanced Research in Biology Engineering Science and Technology, Vol. 2,Special Issue 10, ISSN 2395-695X.

[34]. Ardra, S., & Viswanathan, A. (2012). A Survey On Detection And Mitigation Of Misbehavior In Disruption Tolerant Networks. IRACST-International Journal of Computer Networks and Wireless Communications (IJCNWC), 2(6).