Operational Gateway for Information Health Stalking for Canines with Illness Analysis

Kunal Dilipkumar Rathod and Atharva Rupesh Yerawar
U.G. Students, Department of Computer Science and Engineering
Jawaharlal Darda Institute of Engineering and Technology, Yavatmal, Maharashtra, India

Abstract: *Electronic health records are used to extract patient's information instantly and remotely, which can help to keep track of patients' due dates for checkups, immunizations, and to monitor health performance. The Health Insurance Portability and Accountability Act (HIPAA) in the USA protects the patient data confidentiality, but it can be used if data is re-identified using 'HIPAA Safe Harbor' technique. Usually, this re-identification is performed manually, which is very laborious and time captivating exertion. Various techniques have been proposed for automatic extraction of useful information, and accurate diagnosis of diseases. Most of these methods are based on Machine Learning and Deep Learning Methods, while the auxiliary diagnosis is performed using Rule-based methods. Pet care project deals with problems faced in pet services. This project will bring together pet owners and people willing to provide services together. This gives pet owners the ability to choose the types of services they need. The Front-end of the project is designed using HTML and CSS language, back end uses JavaScript language, the database using MySQL, and server-side communication using PHP language. Considering all the criteria of the project was split into 5 parts: coding front-end pages, coding back-end according to front-end, designing and writing database, writing server-side code for communication between back-end and database and last were testing.*

The website has three different portal's - user, doctor, and admin. The admin manages the complete website and has control over user and doctor. All the three contains different sub tabs.

It shows all the medical history of the pet. The user can book the appointment through the portal. It gives the remainder of the date schedule for check-up and vaccination. The doctor can provide prescription through portal and user can view and print it online. The pet complete medical history can be accessed through QR code by the user and doctor. The pet parent can analysis the pet health condition by visiting FAQ in website which contain short question-answer related to pet behavioural change which is commonly occurring in pets. This online portal helps the pet owner to take care of pet efficiently and doctor can giver proper treatment to pet. This review focuses on recently published papers, which are categorized into Rule-Based Methods, Machine Learning (ML) Methods, and Deep Learning (DL) Methods. Particularly, ML methods are further categorized into Support Vector Machine Methods (SVM), Bayes Methods, and Decision Tree Methods (DT). DL methods are decomposed into Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN), Deep Belief Network (DBN) and Autoencoders (AE) methods. The objective of this survey paper is to highlight both the strong and weak points of various proposed techniques in the disease diagnosis. Moreover, we present advantage, disadvantage, focused disease, dataset employed, and publication year of each category..

Keywords: Online portal, Data medical tracking, Disease diagnosis, Pet health, Pet, Healthcare

REFERENCES

[1] Daniele De Guzman, Samuel Mirasol, King Perez, and Grace Lorraine Intal, Vetconnect: E-Commerce Portal for Veterinary Health care Providers and Service Subscriber, Proceedings of the International Conference on Industrial Engineering and Operations Management Sao Paulo, Brazil, April 5 - 8, 2021

[2] Asih, E. S., Nguyen, P. T., Lydia, E. L., Shankar, K., Hashim, W., &Maseleno, A. (2019). Mobile E-commerce website for technology-based buying selling services.

[3] Bayaton-Obispo, E. (2020, December 17). Shopee, southeast Asia's Newest smart and secure social mobile Marketplace, officially launches in the Philippines. Retrieved February 09, 2021,

[4] Canvas Solutions, I. (n.d.). GoCanvas: Mobile Business Apps and Forms on Android, iPad, iPhone. Retrieved September 06, 2020.

[5] Leong, W. H. (2020). Food Ordering System Using Mobile Phone (Doctoral dissertation, UTAR).

[6] Garavand, A., Aslani, N., Ayyoubzadeh, S. M., & Abhari, S. (2020). E-booking Websites in Iranian Public Clinics: A Step Toward Health Equity. Shiraz E-Medical Journal, 21(12).

[7] Rice, A. (2016). GroomK9. com: A Dog Grooming Management System: Business and Technical Report (Doctoral dissertation, Dublin, National College of Ireland).

[8] M. Chen, Y. Hao, K. Hwang, L. Wang, and L.Wang, "Disease prediction by machine learning over big data from healthcare communities", ," IEEE Access, vol. 5, no. 1, pp. 8869–8879, 2019.

[9] B. Qian, X. Wang, N. Cao, H. Li, and Y.-G. Jiang, "A relative similarity based method for interactive patient risk prediction," Springer Data Mining Knowl. Discovery, vol. 29, no. 4, pp.1070–1093, 2020.

[10] IM. Chen, Y. Ma, Y. Li, D. Wu, Y. Zhang, and C. Youn, "Wearable 2.0: Enable human- cloud integration in next generation healthcare system," IEEE Commun, vol. 55, no. 1, pp. 54– 61, Jan. 2020.