

Health-Guard: Disease Prediction and Recommendation System

Kunal Suresh Pattanshetti, Rohan Khare and Prof. Suvarna Karankal

Department of Artificial Intelligence & Data Science

ISBM College of Engineering, Nande, Pune, India

kunalp0201@gmail.com and rohankumarkhare@gmail.com

rohankumarkhare@gmail.com and karankal.suvarna@gmail.com

Abstract: *One sector that has seen a significant shift as a result of machine learning is the medical field. Machine learning has brought a drastic change in the healthcare sector by predicting the diseases very accurately, fast and within short time. So, if we go see the traditional way of diagnosing a disease is through a specialist doctor where they go through certain procedure like studying symptoms and asking for tests from the patients, however this method is less accurate and takes a lot of time. However, on basis of study, different machine learning algorithms like SVM, KNN, Logistics regression, Decision tree have proved highly fit for prediction of diseases related to Kidney, Heart, Lungs, Parkinsons, etc. with high accuracy. Therefore, the machine learning based software would prove beneficial to the doctor's, medical staff and even the normal people for fast diagnose of the disease which would be more accurate and within a short period of time. So, we have proposed a ML based disease prediction software which will consist of two parts one for the normal people's use and other for the medical faculties use, these parts will be consisting of different diseases which will be predicted on the basis of different medical test results in case of medical faculties part and based on symptoms in case of normal people's part.*

Keywords: Machine Learning, Disease Prediction, SVM, Logistic Regression, KNN

REFERENCES

- [1]. Sethi, R., Thumar, A., Jain, V., & Chavan, S. (2019). Disease prediction application based on symptoms. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, 641–646. <https://doi.org/10.32628/cseit1952189>
- [2]. Kulkarni, V., Surwase, S., Pingale, K., Sarage, S., & Karve, A. (2020). Prediction of Disease Using Machine Learning. *International Research Journal of Engineering and Technology (IRJET)*, 7(5), 2458-2463.
- [3]. Kumar, A., & Pathak, A. (2021). Assistance Tool for Prediction and Monitoring Various Diseases based on Machine Learning. *Turkish Journal of Computer and Mathematics Education*, 12(6), 4013-4023.
- [4]. Singh, A., Yadav, A., Shah, S., & Nagpure, R. (2022). Multiple Disease Prediction System. *International Research Journal of Engineering and Technology (IRJET)*, 9(3), 2395-0072.
- [5]. PARSHANT, & RATHEE, A. (2021). Multiple Disease Prediction Using Machine Learning. *Iconic Research and Engineering Journals*, 6(12). ISSN: 2456-8880.
- [6]. Kumar, A., & Pathak, A. (2021). A Machine Learning Model for Early Prediction of Multiple Diseases to Cure Lives. *Turkish Journal of Computer and Mathematics Education*, 12(6), 4013-4023.