IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 8, June 2022
Impact Factor: 6.252

Smart Hospital Chatbot-Virtual Consultation and Appointment using NLP and Machine Learning

Vijay Ingawale[1], Dinesh Bartakke[2], Shrikant Virkar[3], Sagar Chavan[4], Prof. Manisha Navale[5]
Student, Computer Engineering, NBN Sinhgad School of Engineering Ambegaon bk, Pune[1,2,3,4]
Guide, Computer Engineering, NBN Sinhgad School of Engineering Ambegaon bk, Pune[5]

Abstract: *Healthcare services face a huge challenge of supply-and-demand which you can fix when we create a digital platform. In the traditional healthcare system, patients would go to the hospitals, and they always have to wait for appointments and medical reports. Also, conversation between doctors and patients about their health status and daily lives is not fully remembered by the doctor as well as patients. So, to improve the doctor-patient interaction, we will design and implement a machine learning framework that contains a chatbot, voice transcription and other functionalities. The proposed Medical Chatbot can interact with the users, giving them a realistic experience of chatting with a medical Professional. Our motive is to show that the proposed medical chatbot could be a better alternative to many already existing chatbots in the domain of medicine. An Al enabled conversational UX can deliver personalized experiences to your patients for identifying the illness, scheduling doctor appointments, notifying caregivers about symptoms, monitoring the health status, updating the homecare assistant from time-to time and more. Also, the proposed system converts the voice to text first and then generates prescriptions automatically by extracting the keywords and provides the prescription in the desired format automatically. This system can also generate prescriptions efficiently with just the audio file of the conversation between the doctor and the patient through a phone call.*

REFERENCES

[1] Flora Amato, Stefamo Marrone, "Chatbots meet eHealth: automat zing healthcare", proceeding of diet, May-2018.
[2] Benildalleonor V. Comendador, "Pharmabot: A pediatric generic Medicine consultant Chatbot", proceeding of the JACE, April 2015.
[3] Divya, Indumathi, Ishwarya, Priyasankari, "A SelfDiagnosis Medical Chatbot Using Artificial Intelligence", proceeding MAT Joural, October 2017.
[4] Tohias Kowatsch, Text-based Healthcare Chatbots Supporting Pation and Health", 01 October 2017.
[5] Wenxing Hong. Ziang Xiong, Nannan Zheng, Yang Wang, "A Mestical-History-Based Potential Disease Prediction Algorithm, A Medical History-Based Potential Disease Prediction Algorithm IEEE Access VOLUME 7, 2019, doi 10.1109/ACCESS 20192940644
[6] Dahiwade, D. Patie, G. & Meshrain, E (2019). Designing Disease Prediction Model Using Machine Learning Approach. 2019 Proceedings of the Third International Conference on Computing Methodologies and Communication (CCMC 2019) IEEE Xplore doi:10.1109/ceme 2019.8819782.
[7] Xa, Z., Zhang, J., Zhang, Q. & Vip, P. S. F. (2019). Explainable Learning for Disease Risk Prediction Based on Comorbidity Networks. 2019 IEEE International Conference on Systems, Man Cybernetics (SMC), doi:10.1109/m 2019.891-4644.
[8] Repaka, A. N., Ravikanti, S. D., & Franklin, R. G. (2019) Design and Implementing Heart Disease Prediction Using Naives Bayesian. 2019 3rd International Conference on Trends in Electronics and Informatics (COE), doi:10.1109/ico 2019.8862604.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 8, June 2022
Impact Factor: 6.252

[9] Gao, J., Tian, L, Wang, J., Chen, Y., Song, B., & Hu, X. (2020) Similar Disease Prediction with Heterogeneous Disease Information Networks IEEE Transactions on NanoBioscience. 1 1, doi:10.1109 tnh 2020 299.0983.

[10] Mathew, R. H., Varghese, S., Joy, S. E., & Alex. S. S. (2019) Chatbot for Disease Prediction and Treatment Recommendation using Machine Learning 2019, 3rd International Conference on Trends in Electronics and Informatics (ICOLI), doi: 10.1109/icoei. 2019.8862707.

[11] Maurya, A., Wable, R., Shinde, R. John, S. Jadhav, R., & Dakshayani, R. (2019). Chronic Kidney Disease Prediction and Recommendation of Suitable Diet Plan by using Machine Learning. 2019 International Conference on Nascent Technologies Engineering (ICNTE), doi:10.1109/icte 44896.2019.8946029.

[12] Dahiwade, D., Patie, G. & Meshurum, E (2019). Designing Disease Prediction Model Using Machine Learning Approach. 2019 3rd International Conference Methodologies on Computing and Communication (ICCMC), doi: 10.1109/iceme 2019.8819782.

[13] Pandey, H., & Prabha, S. (2020). Smart Health Monitoring System using 1OT and Machine. Learning Techniques. 2020 Sixth International Conference on Bio Signals, Images, and Instrumentation (ICBSI). doi: 10.1109/icsi49132.2020.9167660.

[14] VijiyaKumar, K., Lavanya, B., Nirmala, I. & Caroline, S. S. (2019) Random Forest Algorithm for the Prediction of Diabetes. 2019 IEEE International Conference on System, Computation Automation and Networking (ICSCAN). doi:10.1109/icscan 2019.8878802.