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Healthcare : A Transformer Network Based Chatbot

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Abstract: *Medical chatbots are becoming more and more common as the healthcare industry changes and places more and more focus on automated and remote services. These digital assistants provide cost savings, prompt answers to healthcare inquiries, and access to medical guidance around-the-clock. The effectiveness of these chatbots depends on how well-informed they are about healthcare.*
Our project's main goal is to employ Transformer network architecture to create a sophisticated chatbot for healthcare. It includes gathering data, choosing a model, recognizing intent and entities, managing conversations, producing responses, integrating knowledge databases, creating user-friendly designs, doing thorough testing, adhering to regulations, and continuously improving. Our objective is to develop a smart conversational agent that can respond to a broad range of healthcare inquiries, provide advice and recommendations tailored to individual diseases, and eventually improve patient satisfaction and healthcare experiences

Keywords: Healthcare Chatbot; Medical Chatbot; Healthcare Automation; Remote Healthcare Services; Disease-specific Recommendations; Hospital Recommendation; Medical Knowledge Base; Intent Recognition; Entity Recognition; Patient-Centric Healthcare; Regulatory Compliance; User-friendly Interface; Continuous Improvement; Healthcare Information Accessibility; Remote Consultations; Healthcare Quality Improvement; Medical Advice;24/7 Healthcare Support;COVID-19 Pandemic Impact

REFERENCES

[1] L. Athota, V. K. Shukla, N. Pandey and A. Rana, "Chatbot for Healthcare System Using Artificial Intelligence," 2020 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2020, pp. 619-622, doi: 10.1109/ICRITO48877.2020.9197833.
[2] https://www.scnsoft.com/files/healthcare/knowledge-brief-sciencesoft-healthcare-it-services-2022-quadrant-knowledge-solutions.pdf
[3] U. Gur Çekmez et al., “Derin Ö˘ grenme ile A˘ g Anomali Tespiti Network Anomaly Detection with Deep Learning Ozgur Koray Sahingoz,” 2018, pp. 1–4.
[4] A. Chawla, B. Lee, S. Fallon, and P. Jacob, “Host Based Intrusion Detection System with Combined CNN/RNN Model,” "Lect. Notes Comput. Sci. (including Subser. Lect. Notes Artif. Intell. Lect. Notes Bioinformatics), vol. 11329 LNAI", pp. 149–158, 2019.
[5] Bird, S., Klein, E., & Loper, E. (2009). Natural language processing with python. O’Reilly Media