Speech Recognition Chatbot with Web Scraping

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Abstract: The integration of web scraping techniques into speech recognition chatbots has revolutionized the way users interact with intelligent systems. By leveraging real-time data extraction from the web, chatbots can now provide dynamic and contextually relevant responses to user queries. This paper presents an innovative approach that combines speech recognition and web scraping, enabling chatbots to deliver up-to-date and accurate information.

Keywords: Chatbots

REFERENCES

[1]. Hakkani-Tür, D., & Tür, G. (2002). A New Method for Web Query Classification: Speech. In Proceedings of the International Conference on Acoustics, Speech, and Signal Processing (ICASSP).

[2]. Hinton, G. (2012). Deep Neural Networks for Acoustic Modeling in Speech Recognition. IEEE Signal Processing Magazine, 29(6), 82-97.

[3]. Chen, J., & Wang, W. (2018). A Survey on Chatbot Design Techniques in Speech Conversation Systems. ACM Transactions on Multimedia Computing, Communications, and Applications, 14(2), 1- 22.

[4]. Subasi, A., & Gursoy, M. I. (2019). Voice Recognition and Natural Language Processing for Chatbot. In Proceedings of the 2019 International Congress on Big Data, Deep Learning and Fighting Cyber Terrorism (IBIGDELFT)

[5]. Bastani, O., Pham, T., & El-Khamy, M. (2020). A Comprehensive Study of Web Scraping Technologies. Journal of Data Analysis and Information Processing, 8(1), 22-41.

[6]. Munir, R., Nisar, S., & Hameed, S. (2018). Web Scraping for Data Science: A Comprehensive Review. In Proceedings of the 2018 International Conference on Advances in Computing, Communications and Informatics (ICACCI).

[7]. Raux, A., Langner, B., Black, A., & Eskenazi, M. (2006). Let's Go Public! Taking a spoken dialog system to the real world. In Proceedings of the International Conference on Spoken Language Processing (ICSLP).

[8]. Ghahramani, M., & Yang, S. (2019). A Survey on Chatbot Design Techniques in Speech Conversation Systems. In Proceedings of the 2019 IEEE International Conference on Big Data (Big Data).

[9]. Olszewska, J. I., & Brown, G. (2019). Ethical Issues of Chatbots in the Public Sector. In Proceedings of the 25th Americas Conference on Information Systems (AMCIS).