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Review Report

Data Science Enquiry Chatbot using RASA NLU

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ABSTRACT

This research proposes the development of a smart chatbot using RASA NLU (Natural Language Understanding) to bridge this gap. RASA, an open-source conversational AI framework, enables the bot to classify user intents, extract key entities, and engage in coherent, multi-turn dialogues. The chatbot is a customized academic assistant since it has received specialized training in data science fields like Python, machine learning, statistics, and data visualization. For dynamic, tailored responses, the suggested system combines entity recognition and intent classification based on machine learning. This study demonstrates the potential of conversational AI to improve student learning and educational content accessibility. The system allows for real-time interactions and supports integration with mobile and web platforms. Through user feedback, it develops over time, becoming more accurate and relevant. The chatbot not only improves student comprehension and engagement but also lessens teachers' repetitive workload. By providing round-the-clock assistance, the system encourages autonomous, self-directed learning, which makes it a scalable and clever answer for contemporary data science education. An intriguing AI-powered option for individualized instruction in technical fields is the Data Science Enquiry Chatbot with RASA NLU. With its flexibility, scalability, and contextual awareness in conversations, it successfully gets around the drawbacks of current systems.

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