Design of a large language model for improving customer service in telecom operators

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Abstract

For telecom operators, customer service is integral to their business. Traditional service systems, responsible for managing large amounts of data and complex knowledge bases, need more time retrieval processes and a lack of precision, hindering their ability to respond quickly to customer requests. To address these issues, this paper uses the LangChain programming framework to create a customized Large Language Model (LLM) specifically for the customer service context of telecom operators. It also uses reinforcement learning to improve the performance of the models and reduce the production of incorrect information. Experimental results show that the acceptance of our model's recommended knowledge has increased from 15% to 70%, confirming its reliable operation in resource-constrained environments.

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