

## Leveraging Sentiment Analysis for Quality Improvement in Digital Healthcare Services

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**Abstract :** With the increasing prevalence of online healthcare services, selecting the most suitable doctor has become a complex task, requiring careful consideration of both public sentiment and personal preferences. This paper proposes a sentiment analysis-driven method that integrates public reviews with user-specific criteria and correlated attributes to recommend online doctors. By leveraging Natural Language Processing (NLP) techniques, public sentiment is extracted from online reviews, which is then combined with user-defined preferences such as specialty, years of experience, location, and consultation fees. Additionally, correlated attributes like education and certifications are incorporated to enhance the recommendation accuracy. Experimental results demonstrate that the proposed system significantly improves user satisfaction by providing personalized doctor recommendations that align with both public opinion and individual needs.

**Keywords :** sentiment analysis, online doctors, personal preferences, correlated attributes, recommendation system, healthcare, natural language processing

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