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| Title | Evaluating Teachers’ Performance through Aspect-Based Sentiment Analysis | | |
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| Abstract |  |
| This research demonstrates a novel approach for evaluating teacher performance by conducting aspect-based sentiment analysis (ABSA) on student feedback. A large dataset of over 2 million student comments about teachers is analyzed using cutting-edge natural language processing and customized deep learning techniques. The methodology involves identifying positive, negative and neutral aspects of teaching using a BiLSTM model. Rigorous preprocessing, domain adaptation, and performance metrics ensure a robust and objective evaluation. The granular, nuanced insights obtained through this aspect-level sentiment analysis enable educational institutions to provide targeted and unbiased feedback to teachers on their strengths and areas needing improvement. Moreover, this work lays the foundation for detecting potentially fraudulent reviews in academic settings – a crucial capability for safeguarding assessment integrity. The detailed aspect-based analysis methodology presented here significantly advances subjective and holistic evaluation practices. This research has far-reaching implications for enriching teacher development while upholding the credibility of performance assessments through sentiment analysis innovations. | |