

Paper Title: Aspect-Based Sentiment Analysis for Afaan Oromoo Movie Reviews Using Machine Learning Techniques

Paper Link: <https://doi.org/10.1155/2023/3462691>

Summary

Motivation:

- The driving force behind this research is the requirement for a subtle understanding of sentiment in Afaan Oromoo movie reviews. Already done sentiment analysis methods usually overlook the aspect-level sentiment. It is vital for understanding specific sides of a movie that spectators like or dislike. By focusing on aspect-based sentiment analysis, this research has goal to provide detailed insights into spectators opinions and preferences in Afaan Oromoo movie reviews.

Contribution:

- The research created models for understand sentiments in Afaan Oromoo movie reviews by focusing on specific aspects. The study shows how well they can grasp sentiment at detailed level by gathering and labelling dataset of reviews. It also improves model performance through hyperparameter tuning methods.

Methodology:

- At first they collect Afaan Oromoo movie review dataset. Annotate predefined sides with sentiment polarity. Then experiment with four ml algorithms. They are random forest, logistic regression, support vector machine, MNB. then they are evaluated using metrics like accuracy,

precision, recall, F1-score. Then they applied hyperparameter tuning techniques to optimize the model's performance which tailored them to each specific algorithm.

Conclusion:

- The research proves that aspect-based sentiment analysis works well for Afaan Oromoo movie review dataset. By using ML algorithms along with the right features extracting methods and tuning, we can understand aspect level in Afaan Oromoo language. The are important discovery for movie related services to understand clients preferences.

Limitations:

1. Limited Dataset Size: The research used a small sized dataset. A larger dataset could provide better result.
2. Language Specificity: It only explores one kind of language. In future other languages based research needs to be done.

Synthesis:

- This study highlights the importance of understanding detailed opinions in Afaan Oromoo movie reviews. Also how ML can help the process. There might be some challenges, but we can overcome these in future research