

Deep Learning Techniques on Text Classification Using Natural Language Processing (NLP) In Social Healthcare Network: A Comprehensive Survey

PAPER LINK: <https://ieeexplore.ieee.org/document/9451752>

1 Summary

1.1 Motivation/purpose/aims/hypothesis

This comprehensive survey investigates the application of deep learning techniques in text classification through Natural Language Processing (NLP) within the context of a Social Healthcare Network. Motivated by the increasing relevance of NLP in healthcare, the study aims to analyze the effectiveness of deep learning for classifying textual data in a social healthcare setting.

1.2 Contribution

The primary contribution of this survey lies in its systematic exploration of deep learning techniques in the realm of social healthcare. By synthesizing existing literature, the paper provides insights into the current state of NLP applications and their impact on text classification in the healthcare domain. The survey aims to offer a consolidated view of the advancements, challenges, and potential solutions in this specific context.

1.3 Methodology

The methodology employed involves a thorough review of existing literature, focusing on studies and applications that utilize deep learning techniques for text classification in social healthcare networks. The paper critically analyzes methodologies, algorithms, and their applications, aiming to draw meaningful conclusions about the efficacy of these approaches in healthcare contexts.

1.4 Conclusion

In conclusion, the survey emphasizes the significance of deep learning in text classification within the Social Healthcare Network. It summarizes key findings and highlights areas where further research is needed. The concluding remarks offer valuable insights into the potential impact of NLP-driven text classification on improving healthcare services in social networks.

2 Limitations

2.1 First Limitation

One notable limitation of the survey is the potential bias in the selected literature. The paper acknowledges that the focus on existing studies may introduce a certain level of bias, limiting the diversity of perspectives on the subject. Future research should aim for a more exhaustive literature review to address this constraint.

2.2 Second Limitation

Another limitation is the dynamic nature of technology in healthcare. The rapid evolution of NLP and deep learning techniques may render some findings outdated over time. The survey recognizes the need for periodic updates to ensure the continued relevance and accuracy of the presented insights.

3 Synthesis

The synthesis of ideas from this survey opens avenues for potential applications in social healthcare networks. The findings suggest that the integration of advanced NLP techniques can significantly enhance the accuracy and efficiency of text classification, thereby improving communication and decision-making processes in healthcare. Future scopes may include the development of real-time, context-aware applications that cater to the evolving needs of social healthcare networks.