**REVIEW**

on the thesis of the master’s student: Nussipova Fariza Erikovna

Kazakh-British Technical University

Major: 7M06106 Software Engineering

Graduation project: «**SENTIMENT ANALYSIS OF SOCIAL MEDIA MESSAGES ON DISASTER RESPONSE**»

The thesis focuses on enhancing disaster management strategies through the integration of sentiment analysis of social media and Smart Grid data. The relevance of the research topic is exceptionally high, as it aligns with current scientific and technological advancements, specifically in the areas of natural language processing, machine learning, and disaster management, and contributes to national and global programs aiming to improve disaster responsiveness and community resilience.

The scientific contributions of the thesis are substantial and fitting for a master's level, proposing an innovative method of integrating sentiment analysis with Smart Grid data to effectively predict and improve disaster response strategies. This demonstrates potential in enhancing real-time decision-making during disasters, thus meeting the scientific rigor expected at this academic level.

The results, inferences, and conclusions are based on well-established data collection and analysis methods, including natural language processing and predictive modeling using machine learning techniques. This application enhances the reliability and validity of the findings, providing a solid scientific base.

A notable innovation in the thesis is the novel interdisciplinary approach that merges technical data from smart grids with human-centric data from social media. This integration offers a new perspective on utilizing technology to improve disaster response based on real-time data analysis, marking a significant novelty in the field of disaster management.

The thesis is well-supported by several publications in peer-reviewed conferences and journals, indicating a sufficient level of dissemination and acceptance within the academic community. These publications reflect the core innovations and findings of the dissertation, ensuring that the main provisions are well-documented and accessible.

However, the thesis could benefit from a more detailed discussion on the potential limitations of the data sources used, such as biases inherent in social media data and the challenges of integrating diverse data types. Additionally, a more in-depth elaboration on the ethical considerations of using social media data for disaster response could strengthen the dissertation.

In terms of compliance, the dissertation adheres to the academic and research requirements for a master's thesis, including a thorough literature review, a clear statement of research methods, and a detailed presentation of the results. The formatting and organization of the thesis follow standard academic norms.

In conclusion, F. Nusipova's thesis is a commendable and thorough work that makes a valuable contribution to the field of disaster management. It stands out for its innovative integration of technology and real-time data analysis to enhance disaster response. The research is timely and offers important implications for improving the safety and resilience of communities facing natural disasters. The thesis is recommended for final defense.

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| **Reviewer**  PhD,  Al-Farabi Kazakh National University, associate professor | **Full name of Reviewer**  B.S.Omarov  **“\_\_\_” \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2024** |