Literature Review on Sentiment Analysis

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1 Introduction

The literature review process for this project was to familiarise ourselves with studies already conducted on the same database, as well as on related topics.

The key phrases in the literature selection were "natural language processing", "automatic sentiment analysis systems", "opinion mining", "lexicon-centric approach", "machine learning", "neural networks".

Also taking into account that the purpose of this project is primarily educational and my knowledge at this stage of training is rather limited, I used documentation of some of these tools and other tutorials to consult and deepen my understanding of the specifics of working with some tools (Python programming language and its libraries).

The list of used literature is given below.

2 Literature Review

2.1 Sentiment Analysis

- Domadula, P. S. S. V., Sayyaparaju, S. S. (2023). Sentiment Analysis Of IMDB Movie Reviews: A comparative study of Lexicon-based approach and BERT Neural Network model (Bachelor's thesis). Faculty of Engineering, Blekinge Institute of Technology, 371 79 Karlskrona, Sweden.

- Maas, A. L., Daly, R. E., Pham, P. T., Huang, D., Ng, A. Y., Potts, C. (2011). Learning Word Vectors for Sentiment Analysis. In Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies (pp. 142-150). Association for Computational Linguistics. Retrieved from http://www.aclweb.org/anthology/P11-1015

- T. Young, D. Hazarika, S. Poria, andE. Cambria, "Recent trends in deep learning based natural language processing[review article]," IEEE Comput. Intell. Mag., vol. 13, no. 3, pp. 55–75, 2018.

- Derbentsev, V. D., Bezkorovainyi, V. S., Matviychuk, A. V., Pomazun, O. M., Hrabariev, A. V., Hostryk, A. M. (2022). A comparative study of deep learning models for sentiment analysis of social media texts. In M3E2-MLPEED 2022: The 10th International Conference on Monitoring, Modeling Management of Emergent Economy . Virtual, Online.

- Arora, K., Gupta, N., Pathak, S. (2023). Sentiment Analysis on IMDb Movies Review using BERT. In Proceedings of the Fourth International Conference on Electronics and Sustainable Communication Systems (ICESC-2023) (pp. [page range]). IEEE Xplore Part Number: CFP23V66-ART; ISBN: 979-8-3503-0009-3.

- Maas, A. L., Daly, R. E., Pham, P. T., Huang, D., Ng, A. Y., Potts, C. (Stanford University, Stanford, CA 94305). Learning Word Vectors for Sentiment Analysis.

- Galchenko, Y. V. (2022). Classification of Texts by Sentiment Using Machine Learning Methods [Bachelor's Thesis, Peter the Great St. Petersburg Polytechnic University, Institute of Computer Science and Technology]. DOI: 10.18720/SPBPU/3/2022/vr/vr22-2671

- Mikolov, T., Chen, K., Corrado, G., Dean, J. (2013). Efficient Estimation of Word Representations in Vector Space. Google Inc. arXiv:1301.3781v3 [cs.CL]. Retrieved from https://arxiv.org/pdf/1301.3781.pdf

2.2 Guidebooks

- Bird, S., Klein, E., Loper, E. (2009). Natural Language Processing with Python. O'Reilly Media, Inc.

- Ivanov, N. (2022, January 6). Comparative Analysis of Comment Sentiment on YouTube (Caution: Strong Language). Habr [Online]. Available at: https://habr.com/ru/articles/599445/ (Accessed: 16.09.2023).

- Vasiliev, Y. (2020). Natural Language Processing with Python and spaCy: A Practical Introduction. No Starch Press.