

Topic for Bachelor's Thesis



Title: Understanding User's reactions when buying a specific item or reacting on a particular topic

Supervisor: Nour Jnoub

Contact: nour.jnoub@wu.ac.at

Starting period: immediately

Description:

Social media networks like Twitter or Facebook or commercial websites like Amazon are rich with textual content such as reviews, posts, or comments. Analyzing such observations plays an essential role in realizing the community's well-being and evaluating their daily difficulties. The project aims to use machine learning techniques, natural language processing techniques to detect the essential features from text and classify users concerning their attitudes and other features they might have in common. Results of the project are to be demonstrated by a running demo as a web application.

Technologies: Python, NLTK, Scikit-learn, Keras

Literature to start with:

Ali, F., Kwak, K.-S., & Kim, Y.-G. (2016). Opinion mining based on fuzzy domain ontology and Support Vector Machine: A proposal to automate online review classification. *Applied Soft Computing*, 47, 235-250. https://doi.org/10.1016/j.asoc.2016.06.003

Messaoudi, C., Guessoum, Z. & Romdhane, L. B. (2022) Opinion mining in online social media: a survey. *Social Network Analysis and Mining*, 12(1), 1-18. https://doi.org/10.1007/s13278-021-00855-8

Araujo, A. F., Gôlo, M. P. S. & Marcacini, R. M. (2022). Opinion mining for app reviews: an analysis of textual representation and predictive models. *Automated Software Engineering*, 29(1), 1-30. https://doi.org/10.1007/s10515-021-00301-1

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