

Data Quality Improvement; Evaluate Arguments for Generating Opinionated Sales Conversations

Master/Bachelor Thesis

Motivation

Argumentation and debating are the process of forming reasons that humans engage in. Sales negotiation is one of the conversational activities in which a buyer and a seller communicate reasons to arrive at a satisfactory selection amongst alternatives. In our lab, we have simulated the conversation between the customer and salesperson when they express their own opinions, not only to convince each other but also in order to learn from this negotiation. This preliminary work posed new challenges, such as how to improve the quality of the conversation by identifying stronger arguments. In this work, we are interested in addressing this challenge.

Difficulty

Analysis



Programming



Literature



Task Description



Product reviews are a large corpus of textual data on consumer opinions which can influence purchase decisions for the customers. Explicitly, structuring the opinions into arguments could help better understand customers' disposition towards a product throughout the conversation. While reviews can be sorted by rating, there is limited support to indicate arguments and counterarguments in the corpus. Our goal is to identify the arguments in the corpus, categorize the arguments, and possibly paraphrase them. Work can be submitted for publication upon completion.

Contact

Prof. Dr. Lucie Flek

Vahid Sadiri Javadi

✉ vahid@uni-marburg.de

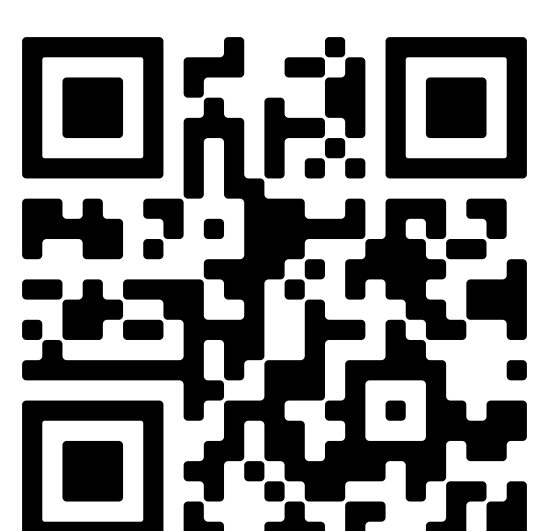
📍 [caisa-lab.github.io](https://github.com/caisa-lab)

☎ 06421 / 28 - 21586

📠 06421 / 28 - 28902

📍 Hans-Meerwein-Straße 6,
35043, Marburg

Room: 04C21 (Staircase C,
Level 4)



References

- [1] Henning Wachsmuth, Nona Naderi, Yufang Hou, Yonatan Bilu, Vinodkumar Prabhakaran, Tim Alberdingk Thijm, Graeme Hirst, and Benno Stein. Computational argumentation quality assessment in natural language. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics: Volume 1, Long Papers*, pages 176–187, 2017.
- [2] Erik Körner, Gregor Wiedemann, Ahmad Dawar Hakimi, Gerhard Heyer, and Martin Potthast. On classifying whether two texts are on the same side of an argument. In *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing*, pages 10130–10138, 2021.