Literaturverzeichnis

- [Atalla et al., 2011] Atalla, M., Scheel, C., de Luca, E. W., and Albayrak, S. (2011). Investigating the applicability of current machine-learning based subjectivity detection algorithms on German texts. In <u>Proceedings of Workshop on Robust Unsupervised and Semisupervised Methods in Natural Language Processing</u>, pages 17–24.
- [Baccianella et al., 2010] Baccianella, S., Esuli, A., and Sebastiani, F. (2010). Sentiwordnet 3.0: An enhanced lexical resource for sentiment analysis and opinion mining. In Proceedings of LREC, volume 10, pages 2200–2204.
- [Banerjee et al., 2015] Banerjee, S., Chua, A. Y., and Kim, J.-J. (2015). Using supervised learning to classify authentic and fake online reviews. In Proceedings of the 9th International Conference on Ubiquitous Information Management and Communication, page 88. ACM.
- [Basile et al., 2019] Basile, V., Bosco, C., Fersini, E., Nozza, D., Patti, V., Pardo, F. M. R., Rosso, P., and Sanguinetti, M. (2019). SemEval-2019 task
 5: Multilingual detection of hate speech against immigrants and women in twitter. In Proceedings of the 13th International Workshop on Semantic Evaluation, pages 54–63.
- [Benamara et al., 2017] Benamara, F., Taboada, M., and Mathieu, Y. (2017). Evaluative language beyond bags of words: Linguistic insights and computational applications. Computational Linguistics, 43(1):201–264.
- [Bird et al., 2009] Bird, S., Klein, E., and Loper, E. (2009). <u>Natural language processing with Python: Analyzing text with the natural language toolkit.</u> O'Reilly Media, Inc.
- [Bond and Paik, 2012] Bond, F. and Paik, K. (2012). A survey of WordNets and their licenses. Small, 8(4):5.
- [Bond et al., 2016] Bond, F., Vossen, P., McCrae, J. P., and Fellbaum, C. (2016). CILI: The Collaborative Interlingual Index. In <u>Proceedings of the Global WordNet Conference</u>, volume 2016.

- [BVDW, 2016] BVDW (2016). Erfolgsmessung in Social Media. Richtlinie zur Social-Media-Erfolgsmessung in Unternehmen des Bundesverbandes Digitale Wirtschaft (BVDW) e.V. https://www.bvdw.org/fileadmin/bvdw/upload/publikationen/social_media/Social_Media_Erfolgsmessung_2016.pdf, zuletzt geprüft am 03.12.2019.
- [Carstensen et al., 2009] Carstensen, K.-U., Ebert, C., Ebert, C., Jekat, S., Langer, H., and Klabunde, R. (2009). Computerlinguistik und Sprachtechnologie: Eine Einführung. Springer-Verlag.
- [Chaturvedi et al., 2018] Chaturvedi, I., Cambria, E., Welsch, R. E., and Herrera, F. (2018). Distinguishing between facts and opinions for sentiment analysis: Survey and challenges. Information Fusion, 44:65–77.
- [Clematide and Klenner, 2010] Clematide, S. and Klenner, M. (2010). Evaluation and extension of a polarity lexicon for German. In Proceedings of the First Workshop on Computational Approaches to Subjectivity and Sentiment Analysis, pages 7–13.
- [Conrady, 2015] Conrady, R. (2015). Customer Reviews: kaufentscheidend, glaubwürdig, strategierelevant? Eine empirische Studie der ITB und der Fachhochschule Worms.
- [Escalona, 2018] Escalona, T. (2018). Detect sentiment from customer reviews using amazon comprehend. amazon web services. https://aws.amazon.com/de/blogs/machine-learning/detect-sentiment-from-customer-reviews-using-amazon-comprehend/, zuletzt aktualisiert am 26.01.2018, zuletzt geprüft am 03.12.2019.
- [Farias and Rosso, 2017] Farias, D. H. and Rosso, P. (2017). Irony, sarcasm, and sentiment analysis. In Pozzi, F. A., Fersini, E., Messina, E., and Liu, B., editors, Sentiment analysis in social networks, Science Direct e-books, pages 113–128. Morgan Kaufmann, Cambridge, MA.
- [Fellbaum, 1998] Fellbaum, C., editor (1998). WordNet: An Electronic Lexical Database. MIT Press, Cambridge, MA.
- [Ferber, 2003] Ferber, R. (2003). <u>Information Retrieval: Suchmodelle und</u> Data-Mining-Verfahren für Textsammlungen und das Web. dpunkt-Verlag.
- [Fersini et al., 2018] Fersini, E., Rosso, P., and Anzovino, M. (2018). Overview of the task on automatic misogyny identification at IberEval 2018. In IberEval@ SEPLN, pages 214–228.
- [Forsa, 2018] Forsa (2018). Ergebnisbericht Hassrede. Auftraggeber: Landesanstalt für Medien Nordrhein-Westfalen (LfM).(Eingesehen am 11.02.2020).
- [Gitari et al., 2015] Gitari, N. D., Zuping, Z., Damien, H., and Long, J. (2015). A lexicon-based approach for hate speech detection. <u>International Journal of Multimedia and Ubiquitous Engineering</u>, 10(4):215–230.

- [Haixiang et al., 2017] Haixiang, G., Yijing, L., Shang, J., Mingyun, G., Yuanyue, H., and Bing, G. (2017). Learning from class-imbalanced data: Review of methods and applications. Expert systems with applications, 73:220–239.
- [Heyer et al., 2006] Heyer, G., Quasthoff, U., and Wittig, T. (2006). Text Mining: Wissensrohstoff Text. W3l, Herdecke, 18.
- [Hooi et al., 2016] Hooi, B., Shah, N., Beutel, A., Günnemann, S., Akoglu, L., Kumar, M., Makhija, D., and Faloutsos, C. (2016). Birdnest: Bayesian inference for ratings-fraud detection. In <u>Proceedings of the 2016 SIAM</u> International Conference on Data Mining, pages 495–503. SIAM.
- [Hövelmann and Friedrich, 2017] Hövelmann, L. and Friedrich, C. M. (2017). Fasttext and gradient boosted trees at GermEval-2017 on relevance classification and document-level polarity. In [Wojatzki et al., 2017b], pages 30 35
- [Hu and Liu, 2004] Hu, M. and Liu, B. (2004). Mining and summarizing customer reviews. In <u>Proceedings of the tenth ACM SIGKDD international</u> conference on Knowledge discovery and data mining, pages 168–177. ACM.
- [Ideya, 2018] Ideya (2018). Social media monitoring tools and services report excerpts. Analysis and elaborate profiles of more than 150 social technologies & services worldwide. Ideya market report, 9th edition. http://www.ideya.eu.com/publications/social-media-monitoring-tools-and-services-report.html, zuletzt geprüft am 01.12.2019.
- [Jindal and Liu, 2006] Jindal, N. and Liu, B. (2006). Mining comparative sentences and relations. In Proceedings of AAAI-06, the 21st National Conference on Artificial Intelligence, pages 1331–1336.
- [Jindal and Liu, 2008] Jindal, N. and Liu, B. (2008). Opinion spam and analysis. In Proceedings of the 2008 International Conference on Web Search and Data Mining, pages 219–230. ACM.
- [Joshi et al., 2017] Joshi, A., Bhattacharyya, P., and Carman, M. J. (2017). Automatic sarcasm detection: A survey. <u>ACM Computing Surveys (CSUR)</u>, 50(5):73.
- [Jungherr et al., 2012] Jungherr, A., Jürgens, P., and Schoen, H. (2012). Why the pirate party won the German election of 2009 or the trouble with predictions: A response to Tumasjan, A., Sprenger, T.O., Sander, P.G., & Welpe, I.M. Predicting elections with twitter: What 140 characters reveal about political sentiment. Social science computer review, pages 229–234.
- [Karoui et al., 2019] Karoui, J., Benamara, F., and Moriceau, V. (2019).
 Automatic Detection of Irony: Opinion Mining in Microblogs and Social Media. John Wiley & Sons.

- [Kincaid et al., 1975] Kincaid, J. P., Fishburne Jr, R. P., Rogers, R. L., and Chissom, B. S. (1975). Derivation of new readability formulas (automated readability index, fog count and flesch reading ease formula) for navy enlisted personnel. Technical report, Naval Technical Training Command Millington TN Research Branch.
- [Kumar et al., 2018] Kumar, R., Ojha, A. K., Malmasi, S., and Zampieri, M. (2018). Benchmarking aggression identification in social media. In Proceedings of the First Workshop on Trolling, Aggression and Cyberbullying (TRAC-2018), pages 1–11, Santa Fe, New Mexico, USA. Association for Computational Linguistics.
- [Latendorf et al., 2017] Latendorf, A., Kohl, O., and Minarski, A. (2017). Warum hinkt Deutschland in der E-Mobilität hinterher? https://m-result.com/social-media-research/e-mobilitaet-in-deutschland/, zuletzt geprüft am 26.11.2019.
- [Lee et al., 2017] Lee, J.-U., Eger, S., Daxenberger, J., and Gurevych, I. (2017). UKP TU-DA at GermEval 2017: Deep learning for aspect based sentiment detection. In [Wojatzki et al., 2017b], pages 22 – 29.
- [Li et al., 2015] Li, H., Chen, Z., Mukherjee, A., Liu, B., and Shao, J. (2015). Analyzing and detecting opinion spam on a large-scale dataset via temporal and spatial patterns. In ICWSM, pages 634–637.
- [Liu, 2007] Liu, B. (2007). Web data mining: exploring hyperlinks, contents, and usage data. Springer Science & Business Media.
- [Liu, 2012] Liu, B. (2012). Sentiment analysis and opinion mining. <u>Synthesis</u> lectures on human language technologies, 5(1):1–167.
- [Liu, 2015] Liu, B. (2015). <u>Sentiment analysis: Mining opinions, sentiments, and emotions</u>. Cambridge <u>University Press</u>.
- [Liu, 2017] Liu, B. (2017). Many facets of sentiment analysis. In Cambria, E., editor, <u>A Practical Guide to Sentiment Analysis</u>, volume 5, pages 11–39. Springer.
- [Liu and Chien, 2018] Liu, J. and Chien, A. (2018). The forrester wave: Social listening platforms Q3 2018. The 10 providers that matter most and how they stack up. www.forrester.com.
- [Loria et al., 2014] Loria, S., Keen, P., Honnibal, M., Yankovsky, R., Karesh, D., Dempsey, E., et al. (2014). TextBlob: Simplified text processing. <u>Secondary</u> TextBlob: Simplified Text Processing.
- [Market Research Future, 2019] Market Research Future (2019). Sentiment analytics market report. global forecast 2023. https://www.marketresearchfuture.com/reports/sentiment-analytics-market-4304, zuletzt geprüft am 15.11.2019.

- [Maynard and Funk, 2011] Maynard, D. and Funk, A. (2011). Automatic detection of political opinions in tweets. In Extended Semantic Web Conference.
- [Mikolov et al., 2013] Mikolov, T., Sutskever, I., Chen, K., Corrado, G. S., and Dean, J. (2013). Distributed representations of words and phrases and their compositionality. In <u>Advances in neural information processing systems</u>, pages 3111–3119.
- [Minh et al., 2018] Minh, D. L., Sadeghi-Niaraki, A., Huy, H. D., Min, K., and Moon, H. (2018). Deep learning approach for short-term stock trends prediction based on two-stream gated recurrent unit network. <u>IEEE Access</u>, 6:55392–55404.
- [Mishra et al., 2017] Mishra, P., Mujadia, V., and Lanka, S. (2017). GermEval 2017: Sequence based models for customer feedback analysis. In [Wojatzki et al., 2017b], pages 36 42.
- [Mishra et al., 2019] Mishra, P., Tredici, M. D., Yannakoudakis, H., and Shutova, E. (2019). Abusive language detection with graph convolutional networks. CoRR, abs/1904.04073.
- [Mishra et al., 2019] Mishra, P., Yannakoudakis, H., and Shutova, E. (2019). Tackling Online Abuse: A Survey of Automated Abuse Detection Methods. arXiv e-prints.
- [Mohammad, 2016] Mohammad, S. M. (2016). Sentiment analysis: Detecting valence, emotions, and other affectual states from text. In <u>Emotion measurement</u>, pages 201–237. Elsevier.
- [Mukherjee, 2015] Mukherjee, A. (2015). Detecting deceptive opinion spam using linguistics, behavioral and statistical modeling. In Proceedings of ACL-IJCNLP 2015.
- [Naderalvojoud et al., 2017] Naderalvojoud, B., Qasemizadeh, B., and Kallmeyer, L. (2017). HU-HHU at GermEval-2017 sub-task B: Lexicon-based deep learning for contextual sentiment analysis. In [Wojatzki et al., 2017b], pages 18-21.
- [Nagappan and Shihab, 2016] Nagappan, M. and Shihab, E. (2016). Future trends in software engineering research for mobile apps. In <u>2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER)</u>, volume 5, pages 21–32. IEEE.
- [Nakov et al., 2016] Nakov, P., Ritter, A., Rosenthal, S., Sebastiani, F., and Stoyanov, V. (2016). SemEval-2016 task 4: Sentiment analysis in twitter. In Proceedings of SemEval-2016, pages 1–18.
- [Nithyanand et al., 2017] Nithyanand, R., Schaffner, B., and Gill, P. (2017). Online political discourse in the trump era. arXiv preprint arXiv:1711.05303.

- [Nobata et al., 2016] Nobata, C., Tetreault, J., Thomas, A., Mehdad, Y., and Chang, Y. (2016). Abusive language detection in online user content. In Proceedings of the 25th international conference on World Wide Web, pages 145–153. International World Wide Web Conferences Steering Committee.
- [OpenText, 2019] OpenText (2019). OpenText Magellan for unstructured data. A fast, powerful, innovative way to find the value hidden in unstructured data, including documents and social media feeds. https://www.opentext.de/file_source/OpenText/en_US/PDF/opentext-magellan-variant-so-v1.pdf, zuletzt geprüft am 19.11.2019.
- [Ortega-Bueno et al., 2019] Ortega-Bueno, R., Rangel, F., Hernández Farias, D., Rosso, P., Montes-y Gómez, M., and Medina Pagola, J. E. (2019). Overview of the task on irony detection in spanish variants. In Proceedings of the Iberian Languages Evaluation Forum (IberLEF 2019), co-located with 34th Conference of the Spanish Society for Natural Language Processing (SEPLN 2019). CEUR-WS. org.
- [Ott et al., 2011] Ott, M., Choi, Y., Cardie, C., and Hancock, J. T. (2011). Finding deceptive opinion spam by any stretch of the imagination. In <u>Proceedings</u> of the 49th Annual Meeting of the Association for Computational Linguistics: <u>Human Language Technologies-Volume 1</u>, pages 309–319. Association for Computational Linguistics.
- [Padilla Montani and Schüller, 2018] Padilla Montani, J. and Schüller, P. (2018). TUWienKBS at GermEval 2018: German Abusive Tweet Detection. In Proceedings of GermEval 2018, 14th Conference on Natural Language Processing (KONVENS 2018), Vienna, Austria September 21, 2018.
- [Pang and Lee, 2004] Pang, B. and Lee, L. (2004). A sentimental education: Sentiment analysis using subjectivity summarization based on minimum cuts. In Proceedings of the 42nd Annual Meeting of the Association for Computational Linguistics (ACL-04), pages 271–278.
- [Pang and Lee, 2008] Pang, B. and Lee, L. (2008). Opinion mining and sentiment analysis. In FNT in Information Retrieval 2, volume 1–2, pages 1–135.
- [Petz et al., 2014] Petz, G., Karpowicz, M., Fürschuß, H., Auinger, A., Stříteskỳ, V., and Holzinger, A. (2014). Computational approaches for mining user's opinions on the web 2.0. <u>Information Processing & Management</u>, 50(6):899–908.
- [Pollard and Sag, 1994] Pollard, C. and Sag, I. A. (1994). <u>Head-Driven Phrase Structure Grammar</u>. University of Chicago Press, Chicago.
- [Pontiki et al., 2016] Pontiki, M., Galanis, D., Papageorgiou, H., Androutsopoulos, I., Manandhar, S., Mohammad, A.-S., Al-Ayyoub, M., Zhao, Y., Qin, B., De Clercq, O., et al. (2016). SemEval-2016 task 5: Aspect based sentiment analysis. In Proceedings of the 10th international workshop on semantic evaluation (SemEval-2016), pages 19–30.

- [Posey, 2019] Posey, B. (2019). How to analyze text with amazon comprehend. https://virtualizationreview.com/articles/2019/07/15/how-to-analyze-text-with-amazon-comprehend.aspx, zuletzt aktualisiert am 15.07.2019, zuletzt geprüft am 03.12.2019.
- [Räbiger et al., 2016] Räbiger, S., Kazmi, M., Saygin, Y., Schüller, P., and Spiliopoulou, M. (2016). Stem at SemEval-2016 task 4: Applying active learning to improve sentiment classification. In <u>Proceedings of SemEval-2016</u>, pages 64–70.
- [Raschka, 2017] Raschka, S. (2017). <u>Machine Learning mit Python</u>. mitp Verlags GmbH.
- [Raschka and Mirjalili, 2019] Raschka, S. and Mirjalili, V. (2019). <u>Python</u> Machine Learning: Machine Learning and Deep Learning with Python, scikit-learn, and TensorFlow 2. Packt Publishing Ltd.
- [Ren and Ji, 2019] Ren, Y. and Ji, D. (2019). Learning to detect deceptive opinion spam: A survey. IEEE Access, 7:42934–42945.
- [Rill et al., 2012] Rill, S., Adolph, S., Drescher, J., Reinel, D., Scheidt, J., Schütz, O., Wogenstein, F., Zicari, R. V., and Korfiatis, N. (2012). A phrase-based opinion list for the German language. In Jancsary, J., editor, Proceedings of KONVENS 2012, pages 305–313. ÖGAI. PATHOS 2012 workshop.
- [Roozenbeek and Salvador Palau, 2017] Roozenbeek, J. and Salvador Palau, A. (2017). I read it on reddit: Exploring the role of online communities in the 2016 us elections news cycle. In Ciampaglia, G. L., Mashhadi, A., and Yasseri, T., editors, SOCIAL INFORMATICS, volume 10540 of Lecture Notes in Computer Science, pages 192–220. SPRINGER INTERNATIONAL PU.
- [Rosenthal et al., 2019] Rosenthal, S., Farra, N., and Nakov, P. (2019). Semeval-2017 task 4: Sentiment analysis in twitter. arXiv preprint arXiv:1912.00741.
- [Ruppenhofer et al., 2020] Ruppenhofer, J., Siegel, M., and Struß, J. M. (2020).

 <u>JLCL Special Issue on Offensive Language</u>, volume 1. GSCL Gesellschaft für Sprachtechnologie und Computerlinguistik.
- [Ruppenhofer et al., 2018a] Ruppenhofer, J., Siegel, M., and Wiegand, M. (2018a). Guidelines for IGGSA shared task on the identification of offensive language. ms.
- [Ruppenhofer et al., 2018b] Ruppenhofer, J., Siegel, M., and Wiegand, M., editors (2018b). Proceedings of the GermEval 2018 Workshop, Vienna, Austria. Austrian Academy of Sciences.
- [Salminen et al., 2018] Salminen, J., Almerekhi, H., Milenković, M., Jung, S.-G., An, J., Kwak, H., and Jansen, B. J. (2018). Anatomy of online hate:

- developing a taxonomy and machine learning models for identifying and classifying hate in online news media. In <u>Twelfth International AAAI Conference</u> on Web and Social Media.
- [Sandulescu and Ester, 2015] Sandulescu, V. and Ester, M. (2015). Detecting singleton review spammers using semantic similarity. In <u>Proceedings of the 24th international conference on World Wide Web</u>, pages 971–976. ACM.
- [Schouten and Frasincar, 2016] Schouten, K. and Frasincar, F. (2016). Survey on aspect-level sentiment analysis. <u>IEEE Transactions on Knowledge and Data Engineering</u>, 28(3):813–830.
- [Schulz et al., 2017] Schulz, K., Mieskes, M., and Becker, C. (2017). h_da participation at GermEval subtask B: Document-level polarity. In [Wojatzki et al., 2017b], pages 13 17.
- [Shojaee et al., 2015] Shojaee, S., Azman, A., Murad, M., Sharef, N., and Sulaiman, N. (2015). A framework for fake review annotation. In <u>Proceedings</u> of the 2015 17th UKSIM-AMSS International Conference on Modelling and Simulation, pages 153–158. IEEE Computer Society.
- [Sidarenka, 2019] Sidarenka, U. (2019). Sentiment Analysis of German Twitter. PhD thesis, Potsdam University, Dissertation eingereicht bei der Humanwissenschaftlichen Fakultät der Universität Potsdam.
- [Siegel, 2020] Siegel, M. (2020). OdeNet. <u>Linguistic Issues in Language</u> Technology, Special Issue on Linking, Integrating and Extending Wordnets.
- [Siegel et al., 2017] Siegel, M., Deuschle, J., Lenze, B., Petrovic, M., and Starker, S. (2017). Automatische Erkennung von politischen Trends mit Twitter brauchen wir Meinungsumfragen noch? <u>Information Wissenschaft & Praxis</u>, 68(1):67–74.
- [Siegel and Drewer, 2012] Siegel, M. and Drewer, P. (2012). Terminologieextraktion multilingual, semantisch und mehrfach verwendbar. In Tagungsband der TEKOM-Frühjahrstagung.
- [Struß et al., 2019] Struß, J. M., Siegel, M., Ruppenhofer, J., Wiegand, M., and Klenner, M. (2019). Overview of GermEval task 2, 2019 shared task on the identification of offensive language. In <u>Proceedings of the GermEval 2019</u> Workshop. Freie Universität Nürnberg.
- [Sukthanker et al., 2018] Sukthanker, R., Poria, S., Cambria, E., and Thirunavukarasu, R. (2018). Anaphora and coreference resolution: A review. <u>arXiv:1805.11824.</u>
- [Tumasjan et al., 2010] Tumasjan, A., Sprenger, T. O., Sandner, P. G., and Welpe, I. M. (2010). Predicting elections with twitter: What 140 characters reveal about political sentiment. In <u>Proceedings of the Fourth International AAAI</u> Conference on Weblogs and Social Media, pages 178–185.

- [van Aken et al., 2018] van Aken, B., Risch, J., Krestel, R., and Löser, A. (2018). Challenges for toxic comment classification: An in-depth error analysis. In Proceedings of the 2nd Workshop on Abusive Language Online (ALW2), pages 33–42, Brussels. Association for Computational Linguistics.
- [Van Hee et al., 2018a] Van Hee, C., Lefever, E., and Hoste, V. (2018a). Exploring the fine-grained analysis and automatic detection of irony on twitter. Language Resources and Evaluation, 52(3):707–731.
- [Van Hee et al., 2018b] Van Hee, C., Lefever, E., and Hoste, V. (2018b). SemEval-2018 task 3: Irony detection in English tweets. In <u>Proceedings of The 12th International Workshop on Semantic Evaluation</u>, pages 39–50.
- [Vilares et al., 2016] Vilares, D., Dovala, Y., Alonso, M. A., and Gómez-Rodríguez, C. (2016). LyS at SemEval-2016 task 4: Exploiting neural activation values for twitter sentiment classification and quantification. In Proceedings of SemEval-2016, pages 79–84.
- [Wang et al., 2012] Wang, G., Xie, S., Liu, B., and Yu, P. S. (2012). Identify online store review spammers via social review graph. ACM Transactions on Intelligent Systems and Technology (TIST), 3(4):61.
- [Wiebe et al., 2004] Wiebe, J., Wilson, T., Bruce, R., Bell, M., and Martin, M. (2004). Learning subjective language. <u>Computational Linguistics</u>, 30(3):277–308.
- [Wiegand et al., 2018a] Wiegand, M., Ruppenhofer, J., Schmidt, A., and Greenberg, C. (2018a). Inducing a lexicon of abusive words a feature-based approach. In Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 1046–1056, New Orleans, Louisiana. Association for Computational Linguistics.
- [Wiegand et al., 2018b] Wiegand, M., Siegel, M., and Ruppenhofer, J. (2018b). Overview of the GermEval 2018 shared task on the identification of offensive language. In <u>Proceedings of the GermEval 2018 Workshop</u>, Vienna, Austria. Austrian Academy of Sciences.
- [Wojatzki et al., 2017a] Wojatzki, M., Ruppert, E., Holschneider, S., Zesch, T., and Biemann, C. (2017a). GermEval 2017: Shared Task on Aspect-based Sentiment in Social Media Customer Feedback. In [Wojatzki et al., 2017b], pages 1–12.
- [Wojatzki et al., 2017b] Wojatzki, M., Ruppert, E., Zesch, T., and Biemann, C., editors (2017b). Proceedings of the GermEval 2017 Shared Task on Aspect-based Sentiment in Social Media Customer Feedback, Berlin, Germany. GSCL.
- [Wolfgruber, 2015] Wolfgruber, M. (2015). <u>Sentiment Analyse mit lokalen</u> Grammatiken. PhD thesis, LMU München.

- [Yadollahi et al., 2017] Yadollahi, A., Shahraki, A. G., and Zaiane, O. R. (2017). Current state of text sentiment analysis from opinion to emotion mining. ACM Computing Surveys (CSUR), 50(2):25.
- [Ye et al., 2016] Ye, J., Kumar, S., and Akoglu, L. (2016). Temporal opinion spam detection by multivariate indicative signals. In ICWSM, pages 743–746.
- [Yu and Hatzivassiloglou, 2003] Yu, H. and Hatzivassiloglou, V. (2003). Towards answering opinion questions: Separating facts from opinions and identifying the polarity of opinion sentences. In Proceedings of the 2003 Conference on Empirical Methods in Natural Language Processing, pages 129–136.
- [Zampieri et al., 2019] Zampieri, M., Malmasi, S., Nakov, P., Rosenthal, S., Farra, N., and Kumar, R. (2019). SemEval-2019 task 6: Identifying and categorizing offensive language in social media (OffensEval). In SemEval@NAACL-HLT.
- [Zaratsian et al., 2013] Zaratsian, D., Osborne, M., and Plumley, J. (2013). Uncovering patterns in textual data with SAS Visual Analytics and SAS Text Analytics. In Proceedings of the SAS®Global Forum 2013 Conference, San Francisco.