Text Mining and Sentiment Analysis

Part 2: Sentiment Analysis and Opinion Mining

Prof. Alfio Ferrara

Lecture 1.1, Aula 4, Feb 16th, 2021 - 9:30 - 11:30 - `theory`

Introduction to sentiment analysis

> Liu, B., & Zhang, L. (2012). A survey of opinion mining and sentiment analysis. In Mining text data (pp. 415-463). Springer, Boston, MA. link

---

Lecture 1.2, Aula 4, Feb 16th, 2021 - 11:30 - 13:30 - `casestudy`

Lexicon based approaches

```
Code on GitHub https://github.com/afflint/textsent/tree/master/sentiwn
```

> Baccianella, S., Esuli, A., & Sebastiani, F. (2010, May). Sentiwordnet 3.0: an enhanced lexical resource for sentiment analysis and opinion mining. In Lrec (Vol. 10, No. 2010, pp. 2200-2204). link

> Hutto, C., & Gilbert, E. (2014, May). Vader: A parsimonious rule-based model for sentiment analysis of social media text. In Proceedings of the International AAAI Conference on Web and Social Media (Vol. 8, No. 1). link

---

Lecture 2.1, Aula 4, Feb 23rd, 2021 - 9:30 - 11:30 - `theory`

Sentence- and Phrase-Level Analysis

> Aggarwal, C. C. (2018). Machine learning for text. Cham: Springer International Publishing. (Chapter 13) link

---

Lecture 2.2, Aula 4, Feb 23rd, 2021 - 11:30 - 13:30 - `case study`

Unsupervised Opinion Extraction

> A. Popescu and O. Etzioni. Extracting product features and opinions from reviews. Natural Language Processing and Text Mining, pp. 9–28, 2007 link

> P. Turney. Thumbs up or thumbs down?: semantic orientation applied to unsupervised classification of reviews. ACL Conference, pp. 417–424, 2002 link

---

Lecture 3.1, Aula 4, Mar 2nd, 2021 - 9:30 - 11:30 - `theory`

Word and Document embeddings

> Aggarwal, C. C. (2018). Machine learning for text. Cham: Springer International Publishing. (Chapter 10.6) link

> Mikolov, T., Sutskever, I., Chen, K., Corrado, G., & Dean, J. (2013). Distributed representations of words and phrases and their compositionality. arXiv preprint arXiv:1310.4546.

> Pennington, J., Socher, R., & Manning, C. D. (2014, October). Glove: Global vectors for word representation. In Proceedings of the 2014 conference on empirical methods in natural language processing (EMNLP) (pp. 1532-1543). link

---

Lecture 3.2, Aula 4, Mar 2nd, 2021 - 11:30 - 13:30 - `case study`

Dependency-Based Word Embeddings

> Levy, O., & Goldberg, Y. (2014, June). Dependency-based word embeddings. In Proceedings of the 52nd Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers) (pp. 302-308). link

---

Lecture 4.1, Aula 4, Mar 9th, 2021 - 9:30 - 11:30 - `theory`

Types of implicit

Lecture 4.2, Aula 4, Mar 9th, 2021 - 11:30 - 13:30 - `theory`

Modeling implicit knowledge in text

Lecture 5.1, Aula 4, Mar 16th, 2021 - 9:30 - 11:30 - `case study`

Preliminary case study on implicit knowledge

Lecture 5.1, Aula 4, Mar 16th, 2021 - 11:30 - 13:30 - `theory`

Presentation and discussion of final project assignment
