Assignment 1 - CT5120

Instructions:

- Answer all the questions and upload your submission as a PDF file on Blackboard with the filename "StudentID_Lastname.pdf" before 23:59 on October 14, 2022.
- All questions carry equal marks and the assignment is worth 25% of the final grade.
- This is an individual assignment, you must not work with other students to complete this assessment.
- Please limit your answers maximum upto 50 to 60 words.

The goal of this assignment is to gain familiarity with suggestion mining and do a short literature review on this topic. Based on your understanding of the lecture material and your reading of the research papers listed below, answer the following questions:

- 1. Define suggestion mining in your own words.
- 2. Explain a use case where suggestion mining could be useful.
- 3. Give any two challenges involved in the suggestion classification task with short explanation.
- 4. Explain implicit and explicit suggestions in your own words along with an example for each.
- 5. Is the following sentence a suggestion: "I would not travel to the USA during the pandemic?" Why or why not?
- 6. Give an example where more context for a sentence could possibly turn a non-suggestion into a suggestion?
- 7. For one crowdsourcing platform, state the advantages and disadvantages of such a platform.
- 8. How is inter-annotator agreement used for the suggestion mining task?
- 9. How will you evaluate a text classification model on a benchmark suggestion classification dataset?
- 10. Suggest one other text classification task similar to suggestion mining. Does it need an annotated (supervised) dataset?

Key Papers:

- 1. Negi, S., De Rijke, M. and Buitelaar, P. (2018). Open domain suggestion mining: Problem definition and datasets. arXiv preprint arXiv:1806.02179. Available at: [1806.02179] Open Domain Suggestion Mining: Problem Definition and Datasets.
- 2. Brun, C. and Hagège, C. (2013). Suggestion Mining: Detecting Suggestions for Improvement in Users' Comments. Research in Computing Science, 70(1), pp.199–209. Available at: https://doi.org/10.13053/rcs-70-1-15

Supplementary Reading:

- Keshav, S., (2007). How to read a paper. ACM SIGCOMM Computer Communication Review, 37(3), pp.83-84. Available at: http://ccr.sigcomm.org/online/files/p83-keshavA.pdf
- 2. Negi, S. and Buitelaar, P. (2015). Towards the extraction of customer-to-customer suggestions from reviews. Proceedings of the 2015 Conference on Empirical

Methods in Natural Language Processing, Association for Computational Linguistics, Lisbon, Portugal, pp.2159–2167. Available at: https://aclanthology.org/D15-1258.