M20Temp17: Advanced NLP

Monsoon 2020

Written Assignment Deadline: 23-11-2020, 23:55 Hrs

Instructor: Dr. Manish Shrivastava TA: Mounika Marreddy, Prashant Kodali

1 General Instructions

- 1. Ensure that the submitted assignment is your original work. Please do not copy any part from any of your friends, seniors, and/or the internet. If any such attempt is caught then serious actions including an F grade in the course is possible.
- 2. Your grade for the assignment will depend and how succinct your report is and the clarity of explanation.

2 Problem Statement

Choose any two papers out of the list given below and summarize the paper in your words. You can make use of figures, tables from the paper or other sources, and explain the gist of paper. Do not copy paste sections from paper. Cover all the sections of the paper, while keeping focus on the methodology, related work, experiments. Write the summary in your words. **Be concise and crisp in your summary.** Report shouldn't exceed more than two pages per paper. You can use additional 2 pages maximum for tables or figures. These are only upper limits, not the criteria.

2.1 List of Papers

- 1. Climbing towards NLU: On Meaning, Form, and Understanding in the Age of Data, Bender et al..
- 2. A Primer in BERTology: What we know about how BERT works, Rogers et al.
- 3. Neural Machine Translation of Rare Words with Subword Units, Sennrich et al.
- 4. The Natural Language Decathlon: Multitask Learning as Question Answering, McCann et al
- 5. Effective Approaches to Attention-based Neural Machine Translation, Luong et al.
- 6. Neural Word Embedding as Implicit Matrix Factorization, Levy et al.
- 7. Tangled up in BLEU: Reevaluating the Evaluation of Automatic Machine Translation Evaluation Metrics, Mathur et al.
- 8. Don't Stop Pretraining: Adapt Language Models to Domains and Tasks, Gururangan et al.

3 Submission Format

One PDF per paper, and zip both PDF files into a single file. File names should be your roll number, followed by "Assignment2". Ex: 2018XXXXXX_WrittenAssignment.