

Grading Rubric for Assignment 4

If your program runs for longer than 10 minutes, you will lose 10 pts. I am willing to be more lenient for the runtime of the extra credit if you have implemented some complex or interesting features which demonstrate significant improvements to the AER.

Part A (30 Points)

7 pts: Correctly output the first 20 sentence pairs + alignments to file for IBM Model 1.

7 pts: Correctly output the first 20 sentence pairs + alignments to file for IBM Model 2.

5 pts: Compute the correct average AER for IBM Model 1 & 2.

IBM Model 1: ≤ 0.665

IBM Model 2: ≤ 0.650

5 pts: Discussion of sentence pair where one model outperforms the other.

6 pts: Find number of iterations that reaches average AER convergence. Discussion for this part. (A4)

Part B (70 Points)

65 pts: Implementation of EM algorithm. This will be graded based on the average AER that your model produces. The base AER will be 0.550. If you achieve a lower AER than this, you will be awarded full credit. If your AER is higher, your score will be computed as follows.

$$65 - 200 \times (YOUR_AER - 0.550)$$

5 pts: Discussion of sentence pair where one Berkeley outperforms IBM models.

Extra Credit (up to 5 pts extra)

This will be based on both how interesting/rigorous your improvements are to the Berkeley Aligner, and how much the average AER improves in comparison to that of the original model.

Late day policy:

10% off for each late day. After three days, the assignment will be given a score of 0.