Introduction to machine translation

Quiz, 4 questions

Congratulations! You passed!

Next Item

1 / 1
points

1.
Find correct statements below.

- [ ] "Interlingual" level of transfer provides the best accuracy in statistical machine translation systems.

Un-selected is correct

- [x] Evaluation in Machine Translation is hard, mostly because of many variations in translations.

Correct

- [ ] Machine Translation area was developing with gradual advances each year.

Un-selected is correct

- [x] Neural Machine Translation is able to produce translations for language pairs that have never been observed in train.

Correct

- [ ] Recent machine translation systems provide equally good quality for all language pairs.

Un-selected is correct

---

1 / 1

points

Introduction to machine translation

Quiz, 4 questions

Compute BLEU score for the following example with 2 digits after decimal point:

System output: *A friend when needed is a friend indeed.*

Reference: *A friend in need is a friend indeed.*

0.41

Correct Response

---

1 / 1 points

3.

Let us say we are building a translation system from Greek (g) to Bulgarian (b). Which of the following statements are correct?

- [x] The noisy channel concept here corresponds to conditional distribution $p(g|b)$.

Correct

- [ ] We will need to build a translation model $p(b|g)$.

Un-selected is correct

- [ ] Language model here is complicated because different word alignments are possible.

Un-selected is correct

- [x] We will need to build language model $p(b)$.

Correct

---

1 / 1

points

Introduction to machine translation

Quiz, 4 questions

Which parametrization for word alignment model would you use, if you know that the source and the target languages are extremely different and have quite irregular word order?

Notation: *(e, f)* - sentence pair, *(I, J)* - their lengths respectively, *a* - alignment.

- Option 1: $p(f, a|e) = p(J|e) \prod_{j=1}^{J} p(a_j) p(f_j|a_j, e)$

Correct

- Option 2: $p(f, a|e) = p(J|e) \prod_{j=1}^{J} p(a_j|j, I, J) p(f_j|a_j, e)$
- Option 3: $p(f, a|e) = p(J|e) \prod_{j=1}^{J} p(a_j|a_{j-1}, I, J) p(f_j|a_j, e)$