

Focus Webinar Release of TAUS QE v2.0

28 March 2024



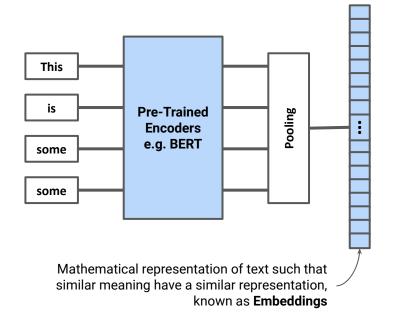
- What's new in TAUS QE v.2.0
- New subscription model
- Q&A

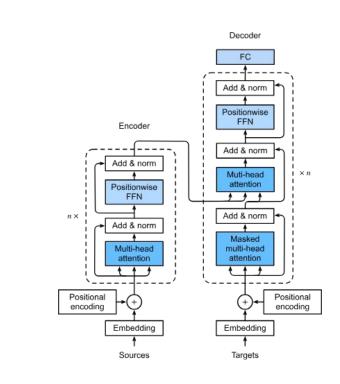


Release of TAUS QE v2.0

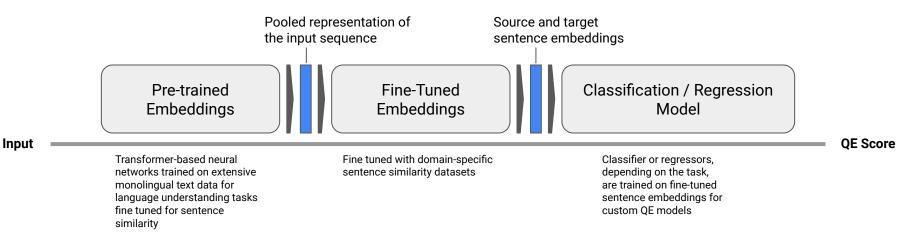


Basic Building Block of a Quality Estimation Model









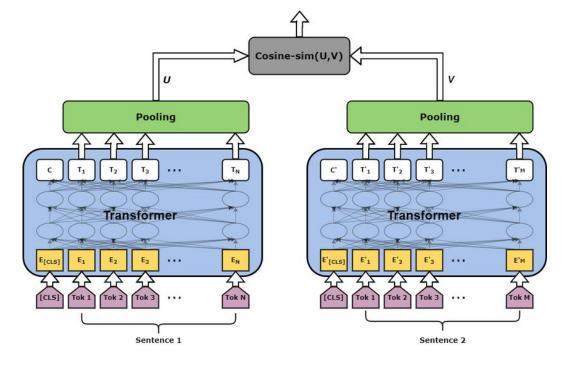
Pre-trained language models can be fine-tuned for tasks related to sentence similarity, and additional classifiers can be incorporated to predict translation quality. This approach leverages the capabilities of pre-trained models to enhance the performance of translation quality assessment models



TAUS QE v1

Based on the customization of **pre-trained BERT** models, it's important to note that BERT pre-training is usually conducted on monolingual data, potentially limiting its inherent generalization to languages not explicitly included in the training set.

The utilized architecture is the **Bi-Encoder**, wherein each sentence is independently encoded, followed by the calculation of similarity.

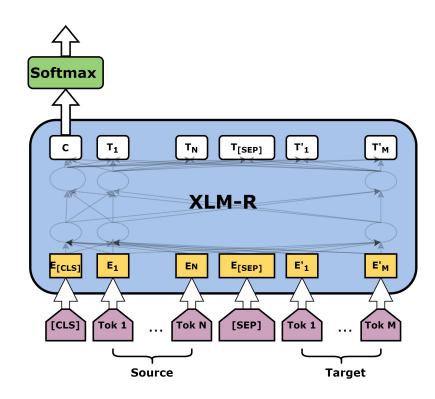




TAUS QE v2

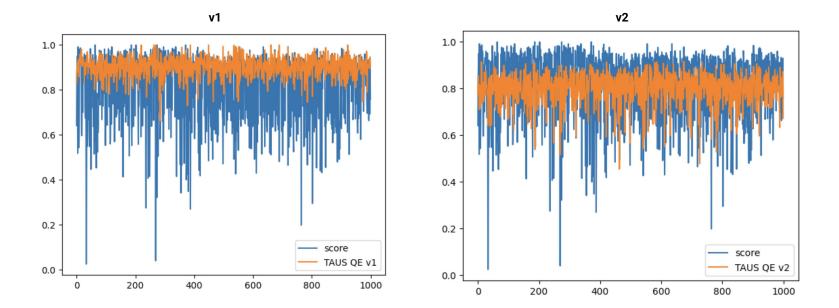
Based on the customization of **pre-trained XML-R** models, which is explicitly designed for cross-lingual tasks. It aims to learn universal language representations that can be effective across multiple languages, making it particularly useful for multilingual applications.

The utilized architecture is the **Cross-Encoder**, wherein both sentence concatenated are encoded using the same model and then a classification head is added on top.





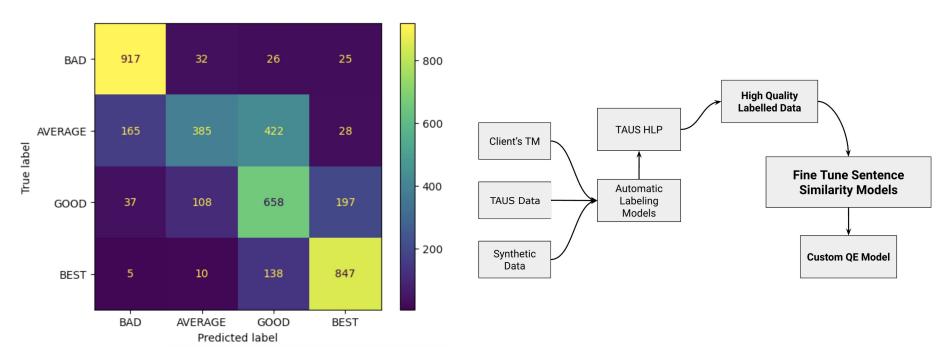
Correlation with Human Judgements v1 vs. v2



Example of English-German Test Data

the language data network

Better Customisation v2



Error Rate | BEST 15% | BAD 8%

How to Access TAUS QE v2



- Indicate the metric version in the API call.
- If the metric specification is omitted in your request, the QE v1.0.0 will be returned by default.
- You can also specify both versions in the request to compare the results.
- If a custom-trained version is available to your account for the requested language pair, then by default the custom version will be returned.

```
import requests
import json
```

```
url = "https://api.sandbox.taus.net/1.0/estimate"
```

```
payload = json.dumps({
  "source": {
   "value" "This is a test.",
   "language": "en"
  },
  "targets":
      "value": "Dat ist ein Test.",
      "language": "de"
  "metrics"
      "uid": "taus_qe",
      "version": "2.0.0"
3)
headers = {
  'Content-Type': 'application/json',
  'Api-Key': 'YOUR-API-KEY'
response = requests.request("POST", url, headers=headers, data=payload)
```

print(response.text)



Pricing: volume- or subscription-based



- Pay for what you use
- Recommended for relatively low volumes of up to 20M characters per year
- Base price: €200 per 1M characters
- Custom model training available at extra charge

Bundle	Price
Free Trial - 500K characters	€0
2 million characters	€400
5 million characters	€1,000
20 million characters	€4,000
50 million characters	€10,000
100 million characters	€16,000



Includes:

- Up to 100 million characters per language pair per month
- Training and maintenance of customer-specific QE models
- NLP retainer: on-demand development of custom NLP features, such as error auto-correction, error categorization, automatic PE, smart translation routing, etc.
- Annual commitment, from €21,600 per language pair per year



For more information, please visit <u>https://www.taus.net/data-solutions/quality-estimation</u> See API specifications <u>https://developer.taus.net/</u> Or contact us at <u>sales@taus.net</u>