

Aspect-based financial sentiment analysis

General Information:

Given a text instance in the financial domain (microblog message, news statement or headline) in English, detect the target aspects which are mentioned in the text (from a pre-defined list of aspect classes) and predict the sentiment score for each of the mentioned target aspect.

Sentiment scores will be defined using continuous numeric values ranged from -1(negative) to 1(positive). 686 annotated financial statements will be made available.

The FiQA task 1 data source contain information about aspect-based sentiment analysis information about posts and news headlines extracted from finance domain web pages like Wikinews, Stocktwits and Reddit, for example.

The train data source consists of two files:

- task1_post_ABSA_train.json
- task1_headlines_ABSA_train.json
- Readme.pdf

Annotation Guideline:

To label each sentence we follow an aspect finance tree which node levels describe each aspect:

E.g.: Stock / Price Action / Bullish / Bull Position

Where:

Level 1 Level 2 Level 3 Level 4

For this example above, we can say that:

Level 1 nodes represent the most generic financial aspect categories

Level 4 nodes are the most specific financial aspect categories

We have hundreds of different financial aspects divided into six levels. For the purpose of **this task** participants are expected to classify/predict at the **level two (only)** in the aspect ontology/tree

ie. Stock / Price Action . However we have trained to annotated to as fine grained, deep as level as possible for the sake of completeness.

Data source description:

1- FiQA_train_ABSA_financial_post.json: This file contains information about Financial aspects in news headlines. It consists of a .json file where each JSON object represents a sample and its associated data.

JSON Fields:

- id: post id;
- sentence: post text;
- target: Entity which receives a opinion.
- sentiment score: true sentiment score for the headline(consists in a value ranged from -1 to 1);
- aspect_category(1,2 and 3): financial aspect represent by different **node level**. The same sentence can have one or more aspects for different targets. The idea is to represent the level 2 node information as aspect output to train/test the model;
- aspect_snippet(1,2 and 3): aspect text snippet which is more informative to identify aspect categories. The same sentence can have one or more snippets for different targets or not.

How to send the predicted results?

After releasing the test set, every participant should submit a .json file containing the name of the team followed by the sample id:predicted aspect category for each test set sample following the example below:

```
{
  'title': "name of the team",
  'results': [
    { 'id': 'Num1',
      'aspect_categories': [ 'aspect11', 'aspect12' ]
      'sentiment_scores': [ '0.2', '0.4' ]
    }
    { 'id': 'Num2',
      'aspect_categories': [ 'aspect21' ]
      'sentiment_score': [ '0.3' ]
    }
    ...
  ]
}
```

More information about the paper submission and the test results submission process for this open challenge, please visit this website <https://sites.google.com/view/fiqa>.