## Python package

# 0. pdfPlumber (从PDF中提取文字)

• 一个教程 (带有代码)

https://medium.com/analytics-vidhya/how-to-easily-extract-text-from-any-pdf-with-python-fc6efd 1dedbe

#### 1. FinBERT from HuggingFace transformers library

• 一个简介 + 案例 (带代码): 可以直接抄这个

https://wandb.ai/ivangoncharov/FinBERT\_Sentiment\_Analysis\_Project/reports/Financial-Sentiment\_Analysis-on-Stock-Market-Headlines-With-FinBERT-Hugging-Face--VmlldzoxMDQ4NjM0

• Hugging Face website: API,包含了NLP需要的全部内容;包括 tokenization; language model; token classification

https://huggingface.co/docs/transformers/index

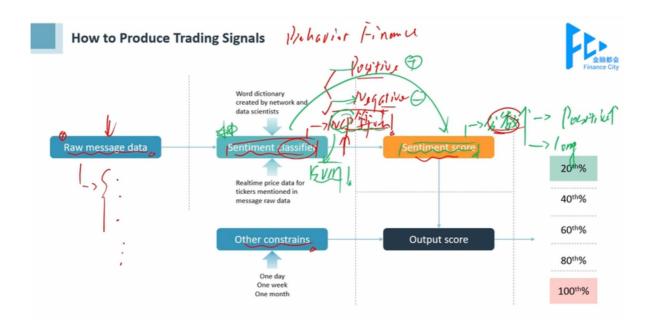
## 2. BERT (作为备选的语料库)

### 3. NLTK: 用于Raw\_text ->word\_list (作为备选)

- 一个简介: https://zhuanlan.zhihu.com/p/98808960
- 教程: 包括lexicon, processing raw text, categorizing and tagging words <a href="https://www.nltk.org/book/">https://www.nltk.org/book/</a>
- Doc: <a href="https://www.nltk.org/api/nltk.html">https://www.nltk.org/api/nltk.html</a>
- 一个流程清晰的案例(带代码): NLTK 做期权的舆情分析 <a href="https://towardsdatascience.com/a-step-by-step-tutorial-for-conducting-sentiment-analysis-a7190a444366">https://towardsdatascience.com/a-step-by-step-tutorial-for-conducting-sentiment-analysis-a7190a444366</a>

#### 其它:

• 舆情分析 — 量化投资 流程



一个 sentiment analysis strategy

里面的图片会很有帮助

https://www.quantstart.com/articles/sentiment-analysis-trading-strategy-via-sentdex-data-in-qstrader/