

30-8-24

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Papers

- ④ → summary of ethics regulation
- ⑤ → More ethics less regulation
- ⑥ →
- ⑦ snake oil → fraud ;
identify ^{as} snake oil ?

NLTK ch-3.

- Decode text from web using UTF-8.
- First parse HTML to text using beautiful soup.
- pseudo code

```
f = open(" ", 'w')  
f.write ( )  
f.close ( )
```

} replaces the old content

```
f = open(" ", 'a')  
f.write ( )  
f.close ( )
```

} Appends the new content

Similarly 'r' is for read.

NLP Pipeline

- Basic pipeline for kind of research.

① Obtaining Data HTML → ASCII → Text → Vocab.
→ tokenised function / word punct function.

→ word Punct function takes care of punctuation.

Regular Expressions.

→ It is a tool to find patterns from the text.

e.g. words end with "ing"

e.g. words in english

all words
english
w for w in nltk.corpus.words.words("en")
if w.islower()
start with
lower case

→ ends with "ing" ⇒ if re.search('ing\$', w)
ending with

→ starts with "win"

⇒ if re.search('^win', w)

re.search('aam', w) → aam, param.

stem

wrong sometimes e.g. listen → list.

lemmatizer

Segmentation

→ text into lines

⇒ Word segmentation → tokenisation

NLTK Ch-4

Procedural vs Declarative

Procedural → sequence & operation

Declarative → variable, variable, variable

→ can check type.

Program Development.

- readability
- easy to debug.
- key checkpoints have output logs.

Algorithmic Design.

- Design / logic of the code defines performance.
- using ~~bad~~ merge sort other than bubble sort save time by n^2 sec.

NLTK Ch-5

Parts-of-Speech (POS) tagging

- Given a sentence / text to find POS tag for every word.
- used to find position and content of each word in whole text.

Code ~~add~~ = word_tokenize(sent)

② nltk.pos_tag(words)

Q. How to make a POS-tagger

Default tagging → everything Noun

Regular Expression tagger →
ing →
ed → past
es → present
etc.

Look up tagger.

→ check freq of tags and use it to tag intent.

→ But without context we can't have high accuracy

→ For this we use Bigrams.

All the above are unigram tagger → they use one word

→ If we use two word → Bigram tagger.