PHILOSOPHY AND HISTORY OF SCIENCE WITH COMPUTATIONAL MEANS

PROF. DR. GERD GRAßHOFF

Natural Language Processing Part 2

To learn everything you need to know about spaCy, take a look at the documentation:

https://spacy.io/usage/spacy-101

Do not forget to check the Notebook of this tutorial to see the examples.

Dependency parse

A very cool feature is displaCy, to visualize a dependency parse or named entities in a sentence.

```
from spacy import displacy
```

To visualize a dependency parse:

```
displacy.render(doc, style='dep', jupyter=True)
```

To visualize named entities:

```
displacy.render(doc, style='ent', jupyter=True)
```

Remember that you have to define 'doc' before.

Here you can see the documentation of displaCy:

https://spacy.io/usage/visualizers

Entity Recognition

These are the types that spaCy can recognize.

TYPE	DESCRIPTION
`PERSON`	People, including fictional.
`NORP`	Nationalities or religious or political groups.
`FAC`	Buildings, airports, highways, bridges, etc.
`ORG`	Companies, agencies, institutions, etc.
`GPE`	Countries, cities, states.
`LOC`	Non-GPE locations, mountain ranges, bodies of water.
`PRODUCT`	Objects, vehicles, foods, etc. (Not services.)
`EVENT`	Named hurricanes, battles, wars, sports events, etc.
`WORK_OF_ART`	Titles of books, songs, etc.
`LAW`	Named documents made into laws.
`LANGUAGE`	Any named language.
`DATE`	Absolute or relative dates or periods.
`TIME`	Times smaller than a day.
`PERCENT`	Percentage, including ”%“.
`MONEY`	Monetary values, including unit.
`QUANTITY`	Measurements, as of weight or distance.
`ORDINAL`	“first”, “second”, etc.
`CARDINAL`	Numerals that do not fall under another type.