## **TC3 Information Retrieval**

Master 1 AI, Upsay T4, March to April

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#### Last time

- relations
  - presenting dependency
  - presenting Spacy tools we need
  - build a baseline
  - spend time together on Notebook 5 (not to be handed in)
- you alone:
  - try to get Prodigy running for Notebook 4
  - prepare submission for next Friday

### **Planning**

- 1. 10/3 gentle introduction
- 2. 17/3 big dataset, binary evaluation
- 3. 24/3 improvements: embeddings
- 4. 28/3 project presentation, technical terms, semantic structure
- 31/3 exploring existing tools: relations, Prodigy NO 7/4!
- 6. 14/4 work on projects, discussions
- 7. 21/4 project presentation

### Today

- presentation of presentations
- actual work on the projects

### **Project**

#### for your patent domain:

- 1. term detection
  - rule-based baseline (dependency-parsing-based is not really rule-based)
  - train statistical model (based on spacy)
  - improve annotation using prodigy
  - evaluate
- 2. relation detection
  - rule-based baseline
  - improve annotation using prodigy
  - find tool(s) to extract relations
  - imagine new ways of improving the annotation quality and visualization
  - 0 ...
- discussion April 14
- presentation of the current state April 21
- It should be clear what you have tried and what remains to be done and what you won't do. I'll provide a sample presentation.
- submission May 5

### **Project**

#### details of required work

- Think of it as a guideline for fellow students: How to build a knowledge graph from a technical text?
- one notebook, with
  - approximately 1 whole A4 page
    ~500 words of textual explanation in MD
  - many comments, in particular each function needs one
- annotation guidelines:
  - what did you call a term?
  - what did you call a relation?
- How did you start? (bootstrapping)
- What and how to compare? (baselines, partial matching...)
- visualization of the annotations?
- overview of global results of your annotated dataset
  - can you type/group the terms and the relations?
  - o do you have un-related terms/sub-graphs?
- comparison with existing work?
- If you had more time, you would...

# Merci de votre

attention

considération

intérêt

écoute

présence

curiosité

question