

Knowledge Graph of Basque Cultural Concepts

Language Resources
final project

erman ta zabal zazu

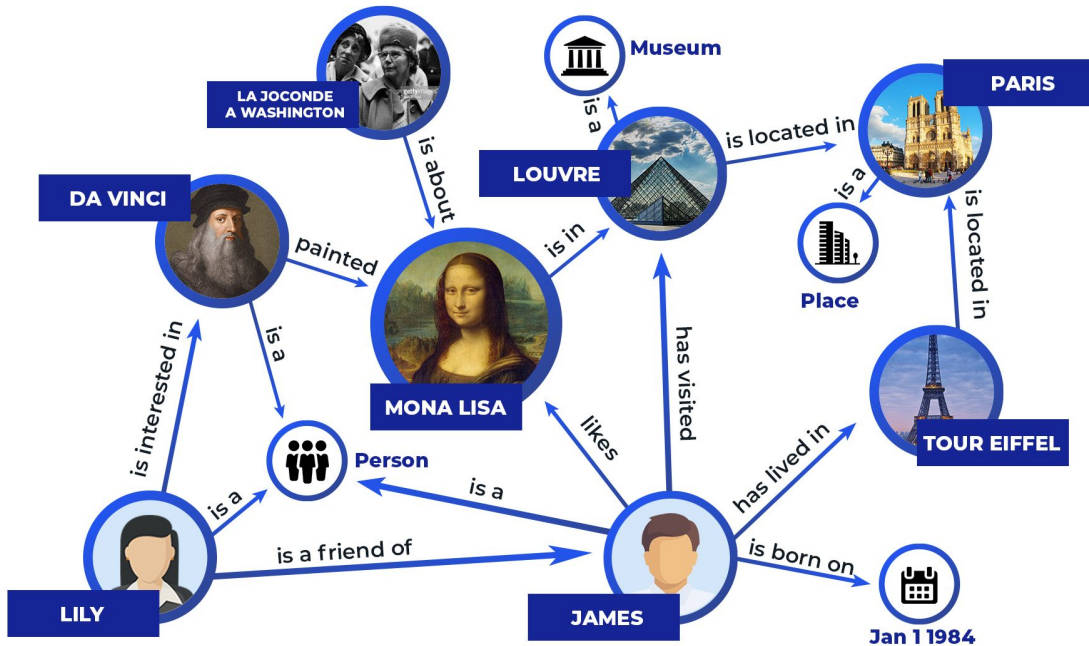


UPV EHU

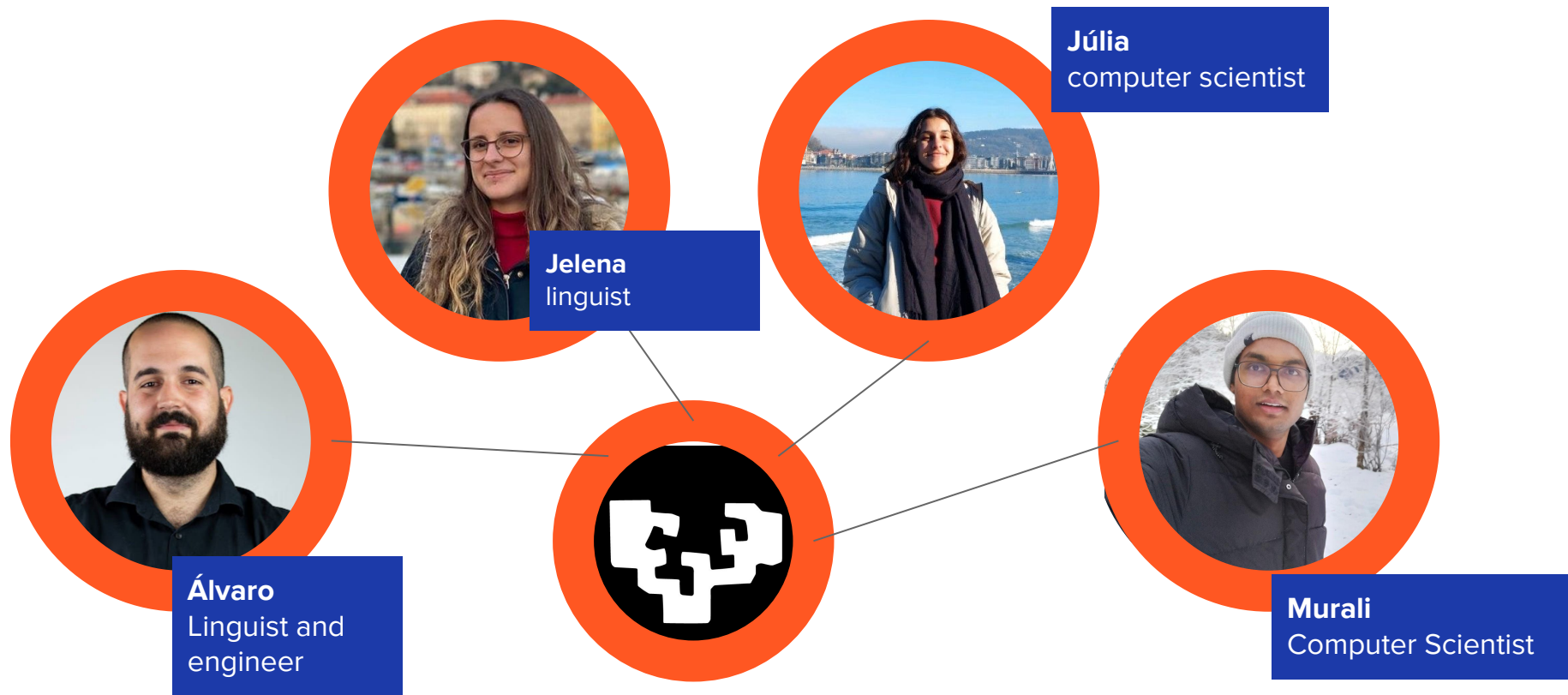
What is a knowledge graph?

a.k.a semantic network

A network of **real-world entities** and the **relationships** between them



but first... our group!



Concepts

Languages

CASTELLANO	EUSKERA
Playa de La Concha	Kontxa Hondartza
País Vasco	Euskadi
galerna	enbata
tarta de queso	gazta tarta
calimocho	kalimotxo



Tortilla de patatas



Pintxo



Peine del viento



Tamborrada



Donostia



Eduardo Chillida

Categories



CATEGORY	SUB-CATEGORY 1	SUB-CATEGORY 2
Culture and the arts	Visual arts	Sculpture

Wikipedia categories



Culture and the arts (see in all page types)

[edit](#) · [watch](#)

Main categories: Culture and The arts

Culture and **Humanities** · Classics · Critical theory · Cultural anthropology · Folklore · Food culture · Food and drink · Language · Literature · Museology · Mythology · Philosophy · Popular culture · Science and culture · Traditions

The arts and **Entertainment** · Arts and crafts · Celebrity · Censorship in the arts · Festivals · Humor · Literature · Museums · Parties · Poetry

Performing arts · Circus · Dance · Film · Music · Opera · Storytelling · Theatre

Visual arts · Architecture · Comics · Crafts · Design · Drawing · Film (Animation) · New media art · Painting · Photography · Sculpture

Games and **Toys** · Board games · Card games · Dolls · Puppetry · Puzzles · Role-playing games · Video games

Sports and **Recreation** · Air sports · American football · Association football · Auto racing · Baseball · Basketball · Boating · Boxing · Canoeing · Cricket · Cycling · Exercise · Fishing · Golf · Gymnastics · Hobbies · Horse racing · Ice hockey · Lacrosse · Olympic Games · Rugby league · Rugby union · Sailing · Skiing · Swimming · Tennis · Track and field · Walking trails · Water sports · Whitewater sports

Mass media · Broadcasting · Film · Internet · Magazines · Newspapers · Publications · Publishing · Television · Radio



Geography and places (see in all page types)

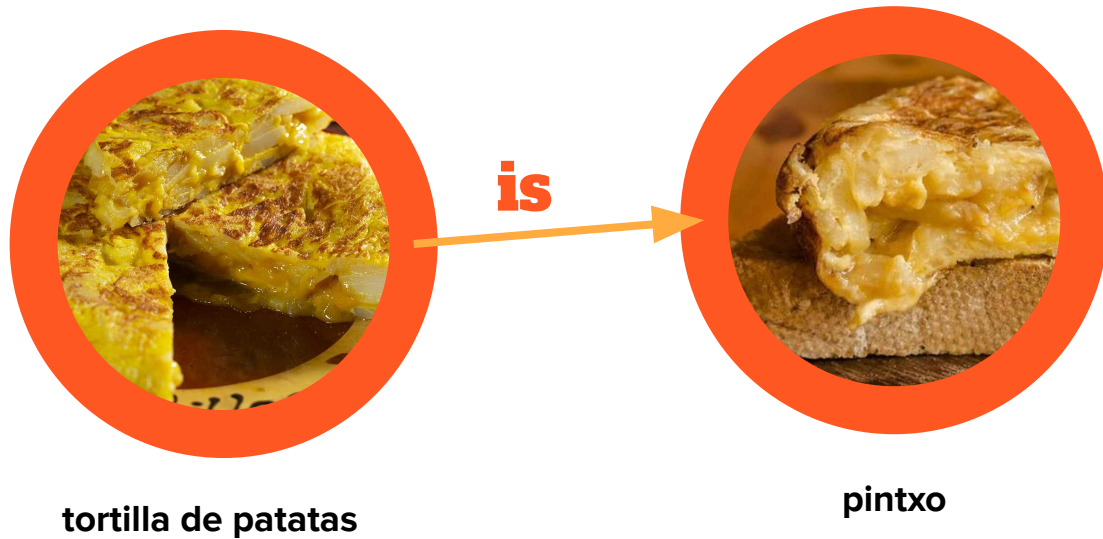
[edit](#) · [watch](#)

Main categories: Geography and Places

Earth · World · Bodies of water · Cities · Communities · Continents · Countries · Deserts · Lakes · Landforms · Mountains · Navigation · Oceans · Populated places · Protected areas · Regions · Rivers · Subterranea · Territories · Towns · Villages

Relations

IS



LOCATED_IN/HAPPENS_IN



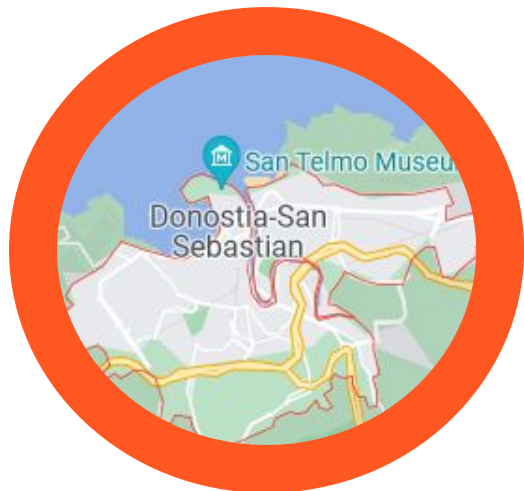
Tamborrada

**islocated/
happens in**



Donostia

IS_PART_OF



Donostia

IS_PART_OF



Basque Country

CREATED/MADE



Peine del viento

**CREATED/
MADE BY**



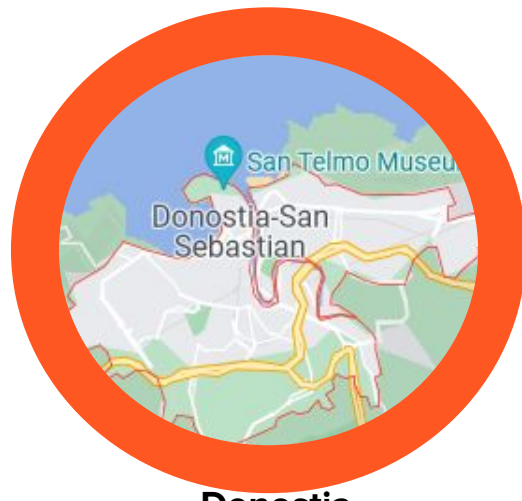
Eduardo Chillida

TYPICAL_IN



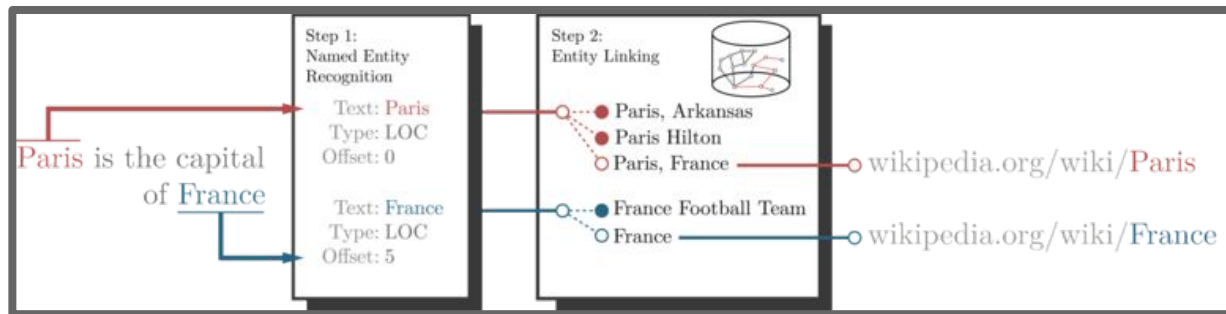
Gilda

TYPICAL_IN



Donostia

Applications



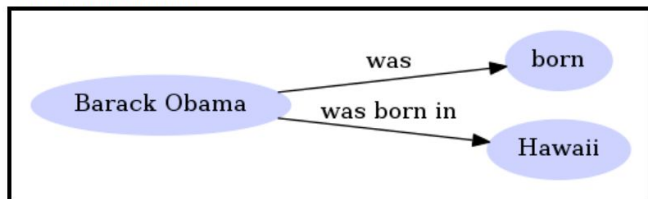
Entity Linking

Unstructured Text

"Barack Obama was born in Hawaii."

Information Extraction

Structured Information



- Information Extraction
- Question Answering
- Common Sense Systems

[Submitted on 6 Dec 2021]

JointLK: Joint Reasoning with Language Models and Knowledge Graphs for Commonsense Question Answering

Yueqing Sun, Qi Shi, Le Qi, Yu Zhang

[Source](#)

KELM: Integrating Knowledge Graphs with Language Model Pre-training Corpora

Thursday, May 20, 2021

Posted by Siamak Shakeri, Staff Software Engineer and Oshin Agarwal, Research Intern, Google Research

[Reference](#)

Give your Text Representation Models some Love: the Case for Basque

**Rodrigo Agerri^{1*}, Iñaki San Vicente^{2*}, Jon Ander Campos^{1*}, Ander Barrena^{1*},
Xabier Saralegi², Aitor Soroa¹, Eneko Agirre¹**

[IXAmBERT: Source](#)

Starting point

	A	B	C	D
1	SPANISH	BASQUE	DESCRIPTION	CATEGORY
2	Antiguo			Geography and places
3	Playa de La Concha	Kontxa Hondartza		
4	La Concha			Geography and places
5	Bataplán			
6	Bilbao	Bilbo		
7	Daba daba			
8	San Sebastián	Donostia		Geography and places
9	Eduardo Chillida	Eduardo Chillida		People and self
10	Egia	Egia		Geography and places
11	País Vasco	Euskadi		Geography and places
12	galerna	enbata		

Concept
Sheet

Relation
Sheet

CONCEPT A	RELATION	CONCEPT B
Peine del Viento	IS_LOCATED_IN / HAPPENS_IN	Ondarreta
Tamborrada	IS_LOCATED_IN / HAPPENS_IN	Donostia/San Sebastián
Gilda	TYPICAL_IN	Donostia/San Sebastián
Gilda	IS	pintxo
Gros	IS_PART_OF	Donostia/San Sebastián
pintxo	IS_PART_OF	pintxo pote
tortilla de patatas	IS	pintxo
Donostia/San Sebastián	IS_PART_OF	Euskadi

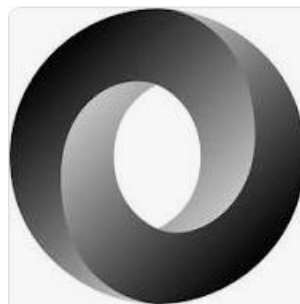
Quantities

- Concepts:
 - Maximum of 50 various concepts related to San Sebastián or the Basque Country in general.
- Relations:
 - 5 distinct relations denoting basic entity relationships.
- Workspllit:
 - Each one have to annotate 10 concepts and its relations.
 - Code the graph

Formats

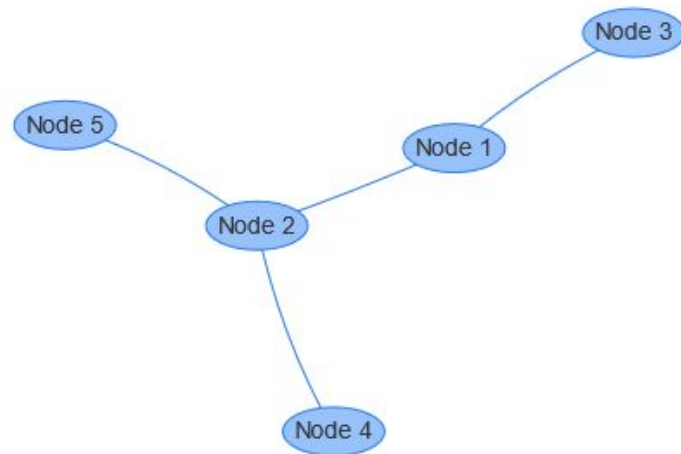


CSV



JSON

vis.js
community edition *



And now...

Let's annotate!

Questions?

