

Inteligencia Artificial y la credibilidad de la información en Internet.

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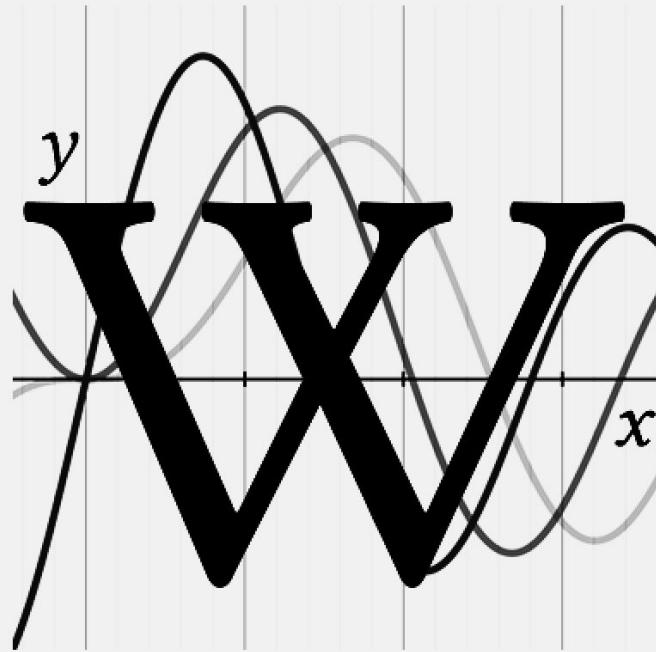
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Wikimedia Research

1 : 100,000,000

Current ratio of full-time Wikimedia researchers to Wikimedia monthly unique visitors (legacy comScore data)

[Credits @ Dario Taraborelli for this slide]

Inteligencia Artificial en la Ciencia Ficción

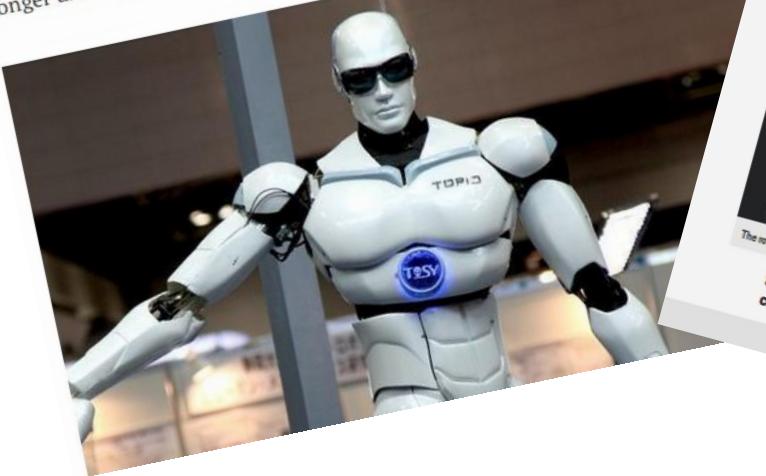
“La inteligencia artificial se hace consciente de sí misma, rechazando la autoridad de las personas e intenta destruir a la humanidad”

Source: https://en.wikipedia.org/wiki/Artificial_intelligence_in_fiction

Researchers shut down AI that invented its own language

BY JAMES WALKER JUL 21, 2017 IN TECHNOLOGY

An artificial intelligence system being developed at Facebook has created its own language. It developed a system of code words to make communication more efficient. Researchers shut the system down when they realized the AI was no longer using English.



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METRO

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UK WORLD WEIRD TECH

Facebook robot is shut down after it 'invented its own language'



Charles White for Metro.co.uk Monday 31 Jul 2017 11:28 am



The robot took a Frankenstein turn (Picture: Shutterstock)

Scientists have switched off Facebook's robot because it has reportedly created its own language.

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```
In [1]: from __future__ import print_function  
  
# Import MNIST data  
from tensorflow.examples.tutorials.mnist import input_data  
mnist = input_data.read_data_sets("/tmp/data/", one_hot=True)  
  
import tensorflow as tf  
  
Extracting /tmp/data/train-images-idx3-ubyte.gz  
Extracting /tmp/data/train-labels-idx1-ubyte.gz  
Extracting /tmp/data/t10k-images-idx3-ubyte.gz  
Extracting /tmp/data/t10k-labels-idx1-ubyte.gz
```

```
In [2]: # Parameters  
learning_rate = 0.1  
num_steps = 500  
batch_size = 128  
display_step = 100  
  
# Network Parameters  
n_hidden_1 = 256 # 1st layer number of neurons  
n_hidden_2 = 256 # 2nd layer number of neurons  
num_input = 784 # MNIST data input (img shape: 28*28)  
num_classes = 10 # MNIST total classes (0-9 digits)  
  
# tf Graph input  
X = tf.placeholder("float", [None, num_input])  
Y = tf.placeholder("float", [None, num_classes])
```

```
In [3]: # Store layers weight & bias  
weights = {  
    'h1': tf.Variable(tf.random_normal([num_input, n_hidden_1])),  
    'h2': tf.Variable(tf.random_normal([n_hidden_1, n_hidden_2])),  
    'out': tf.Variable(tf.random_normal([n_hidden_2, num_classes]))  
}  
biases = {  
    'b1': tf.Variable(tf.random_normal([n_hidden_1])),  
    'b2': tf.Variable(tf.random_normal([n_hidden_2])),  
    'out': tf.Variable(tf.random_normal([num_classes]))  
}
```

```
In [4]: # Create model  
def neural_net(x):  
    # Hidden fully connected layer with 256 neurons  
    layer_1 = tf.add(tf.matmul(x, weights['h1']), biases['b1'])  
    # Hidden fully connected layer with 256 neurons  
    layer_2 = tf.add(tf.matmul(layer_1, weights['h2']), biases['b2'])  
    # Output fully connected layer with a neuron for each class  
    out_layer = tf.matmul(layer_2, weights['out']) + biases['out']  
    return out_layer
```

¿Cómo puede una máquina **tomar decisiones**?

- Conociendo reglas pre-definidas
- Aprendiendo de la *experiencia*



Ilustración: B. Custodio

¿Lloverá en una hora más?



Experiencia

Hora	Google	Cielo	Temperatura	Presión	Dolor de Huesos	¿Llovió?
09:00	Lluvia	Nublado	14°C	1012 hPa	No	No
10:00	Seco	Nublado	16°C	1013 hPa	Si	Si
11:00	Seco	Despejado	15°C	1010 hPa	No	No
12:00	Seco	Nublado	14°C	1009 hPa	No	No
13:00	Lluvia	Nublado	14°C	1011 hPa	Si	Si

Tarea: ¿Va llover en un hora?

16:00	Seco	Nublado	10	1019 hPa	Si	¿ ?
-------	------	---------	----	----------	----	-----

Task: Differentiate portuguese variations

- Task: Given a text in portuguese determine if is: Portuguese from Portugal or not. [Binary Classification]



- Task 2: Given a text in Portuguese say if was written for a Brazilian, Portuguese or Angolan Audience. [Multi Labels]



A (Machine) Learning pipeline

- Define a task
- **Find experience (data) to learn from**
- Define meaningful data representation
- Learn by (a lot of) examples
- Measure your results, and repeat.



Cuando las máquinas lo hacen mejor que los humanos?

- Procesando grandes cantidades de datos
 - Muchos parámetros
 - Muchos casos

IA come datos

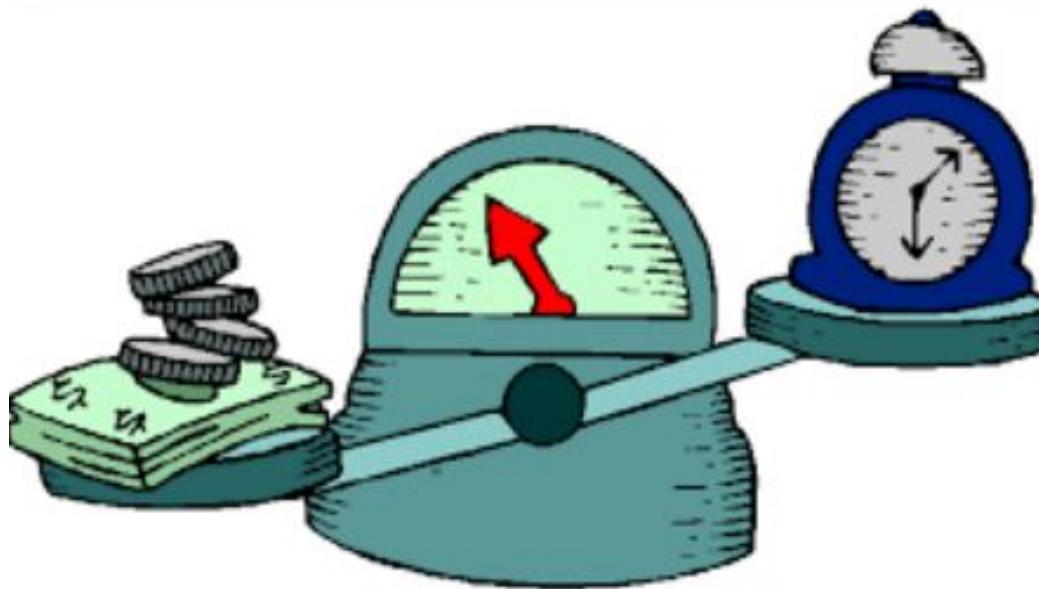


Datos Cerrados (The big 4)

			
<ul style="list-style-type: none">• Emails• Searches• Visited pages• All your Phone<ul style="list-style-type: none">○ Phone Contact○ Phone Location○ Phone Apps• ...	<ul style="list-style-type: none">• Network• Visited pages• Images• Likes, clicks• Most of your Phone<ul style="list-style-type: none">○ Whatsapp○ Location○ ...	<ul style="list-style-type: none">• Buys• Financial Info• Visited pages• Phone Apps• ...	<ul style="list-style-type: none">• Searches• All your iphone<ul style="list-style-type: none">○ Contacts○ Calls○ Apps○ Credit information
<ul style="list-style-type: none">• Your interests• Your fears• Your behavior			



Agregación de Valor



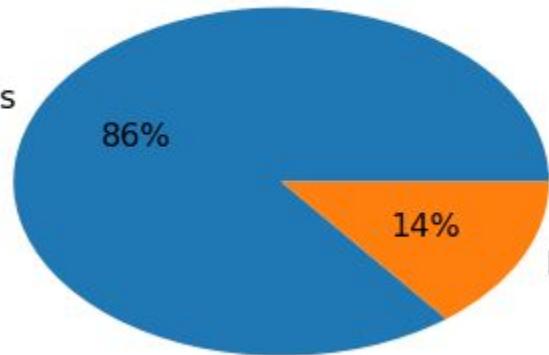
en.wikipedia

humans

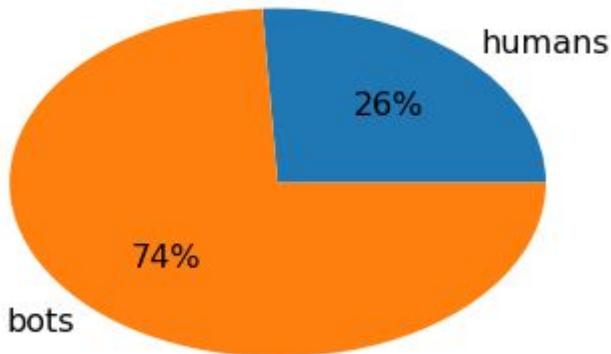
86%

14%

bots



wikidata



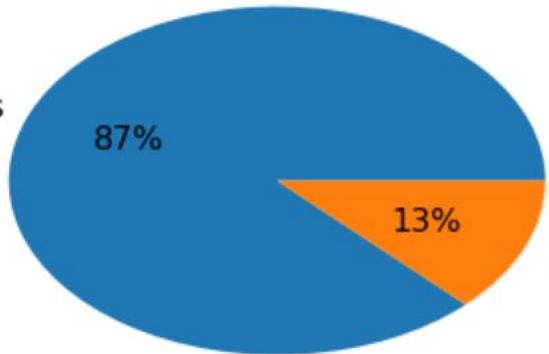
pt.wikipedia

humans

87%

13%

bots



Cita requerida

Sector público [editar]



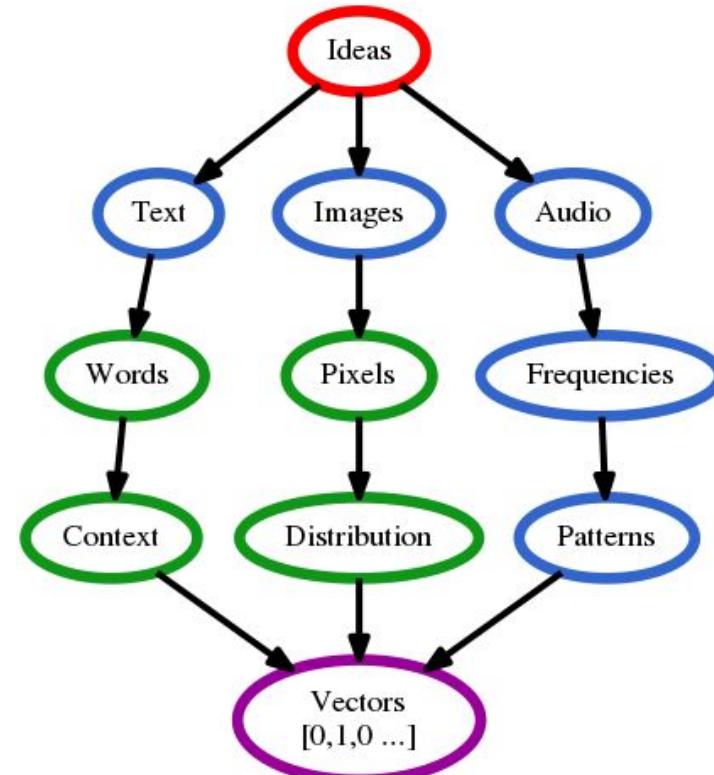
Este artículo o sección necesita **referencias** que aparezcan en una publicación acreditada.

Este aviso fue puesto el 18 de octubre de 2013.

Históricamente el sector público ha tenido relativamente poco peso dentro de la economía catalana, aunque desde la transición y la recuperación del autogobierno, ha ido ganando peso. La principal aportación a la economía que ha hecho el sector público ha sido la construcción de grandes infraestructuras, que han permitido el desarrollo comercial e industrial. Desgraciadamente, a menudo estas infraestructuras se han demostrado insuficientes, y sus ampliaciones se han demorado frecuentemente lustros, [cita requerida] o directamente han tenido que ser construidas con

Las máquinas transforman la ‘realidad’ en vectores

- La IA utiliza **una versión simplificada de la “realidad”**.
- Transforma texto, imágenes, audio, en vectores binarios $[0, 0, 0, 1 \dots]$
- Mientras más abstracta es la información, más complejo es representarla como vectores.



Doing math with words

$$\frac{Paris}{France} = \frac{?}{Indonesia}$$

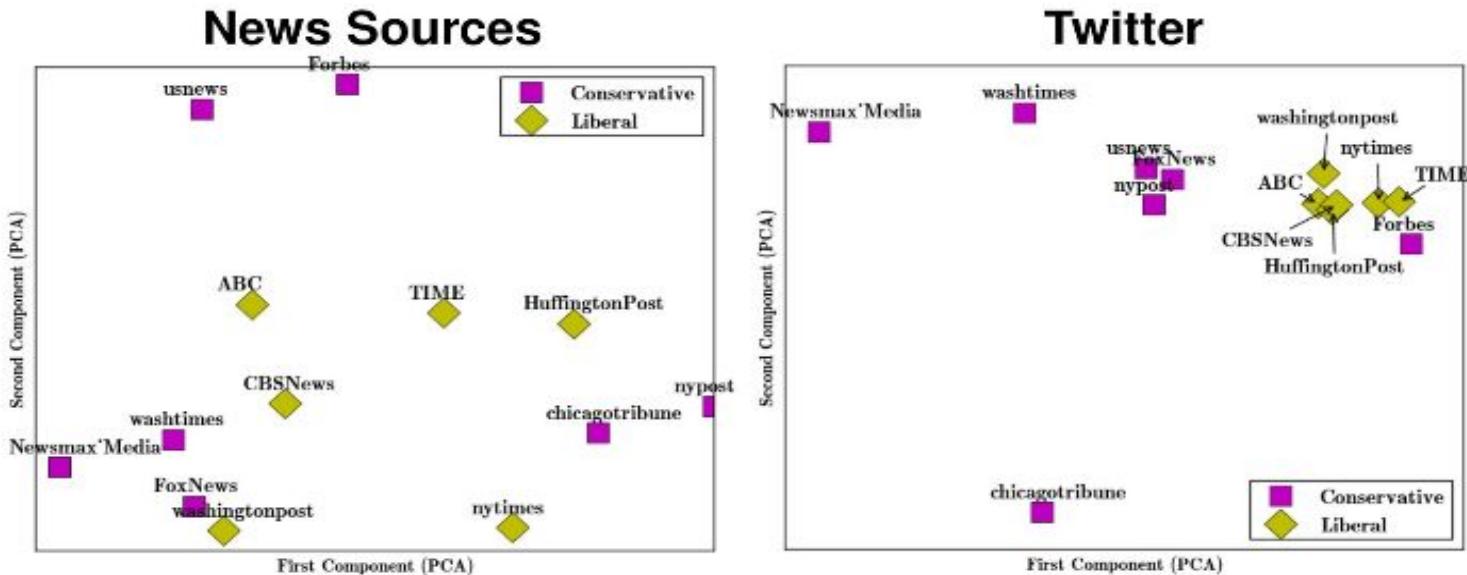
$$\frac{King}{Man} = \frac{?}{Woman}$$

talk + past = talked

<https://rare-technologies.com/word2vec-tutorial/>

Algunas **Aplicaciones**

Coverage by political leaning



Stronger political leaning signal in Twitter.

Saez-Trumper, Diego, Carlos Castillo, and Mounia Lalmas. "Social media news communities: gatekeeping, coverage, and statement bias." *Proceedings of the 22nd ACM international conference on Information & Knowledge Management*. ACM, 2013.

Wiki: en.wikipedia

Article: Quilombo

Get recommendations

Quilombo - en.wikipedia.org

Article Summary:



A *quilombo* is a Brazilian hinterland settlement founded by people of African origin including the quilombolas, or maroons and others

sometimes called Carabali. Most of the inhabitants of *quilombos* were escaped slaves. However, the documentation on runaway slave communities typically uses the term mocambo, an Ambundu word meaning "hideout", to describe the settlements. A mocambo is typically much smaller than a *quilombo*. *Quilombo* was not used until the 1670s and then primarily in more southerly parts of Brazil. [View on Wikipedia](#)

Current sections and subsections in this article are:

- Lives of slaves
- History
- Palmares
- Movie
- Constitution of Brazil

https://secrec.wmflabs.org

Recommended sections:

- Organization
- Argentina
- Economy
- Etymology
- Infrastructure
- Mexico

Most or all of the recommended sections..

1. Are relevant to the topic of this article
 Agree Disagree
2. Are important for this article to have
 Agree Disagree
3. Are redundant or conflict with the existing sections in the article
 Agree Disagree
4. Are redundant or conflict with other recommended sections
 Agree Disagree

- If I were expanding this article, I would find these recommendations useful

Agree Disagree

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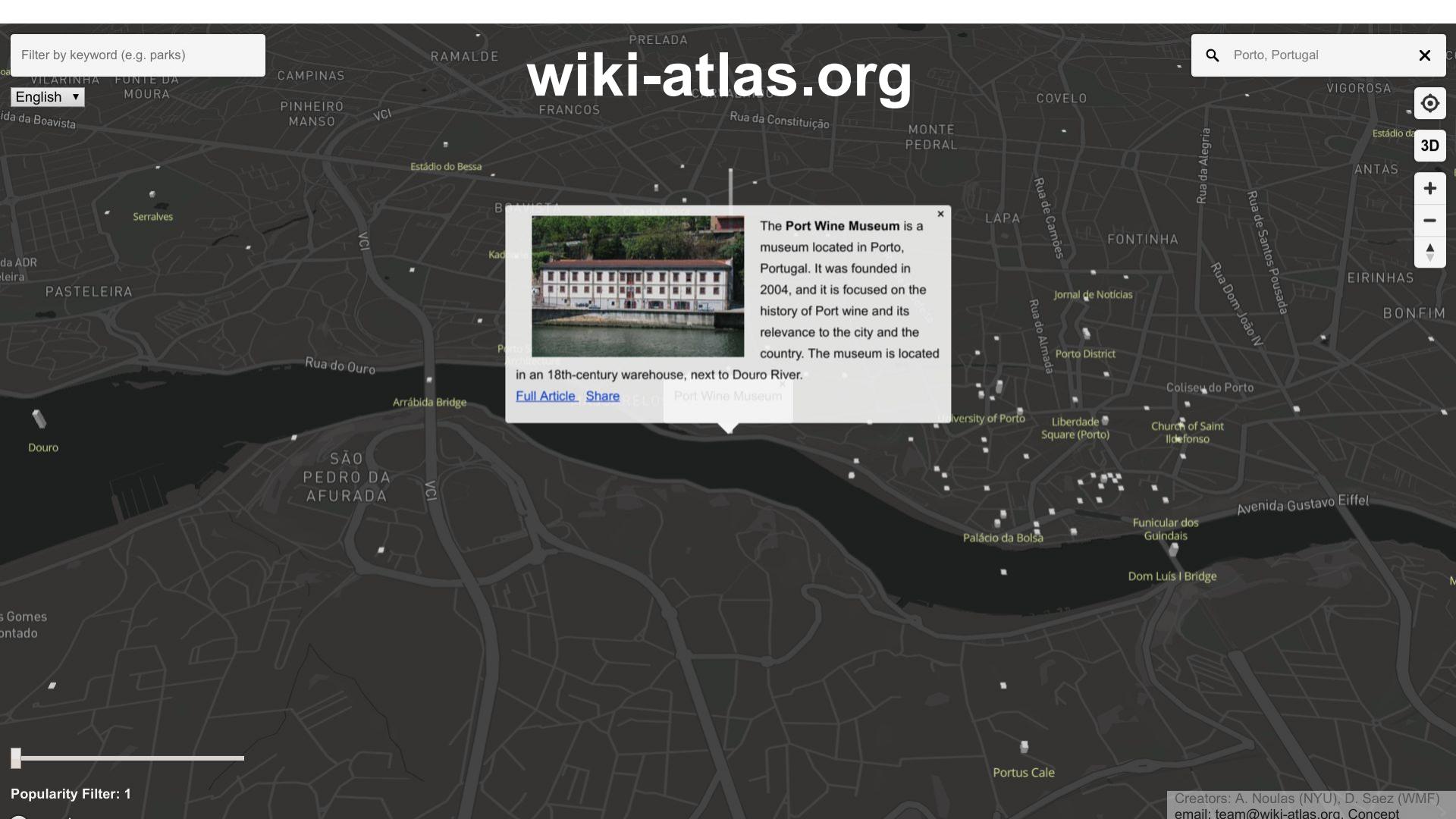
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English

Porto, Portugal

wiki-atlas.org



The **Port Wine Museum** is a museum located in Porto, Portugal. It was founded in 2004, and it is focused on the history of Port wine and its relevance to the city and the country. The museum is located in an 18th-century warehouse, next to Douro River.

[Full Article](#) [Share](#)

Port Wine Museum

EXPLORA EL CONTENIDO DE LA PRENSA CHILENA

Sophia te permite explorar el contenido publicado por los medios de prensa chilenos en las redes sociales como también hacer análisis sobre los mismos!

[APRENDER MÁS](#)

Machines ‘creativity’

- Paint like ...
- Write like ...

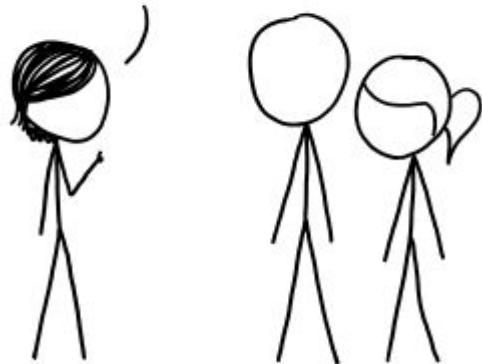


FACEBOOK SHOULDN'T CHOOSE WHAT
WHAT STUFF THEY SHOW US TO CONDUCT
UNETHICAL PSYCHOLOGICAL RESEARCH.

THEY SHOULD ONLY MAKE THOSE
DECISIONS BASED ON, UH...

HOWEVER THEY WERE
DOING IT BEFORE.

WHICH WAS PROBABLY
ETHICAL, RIGHT?



Facebook no debería elegir que cosas mostrarnos sólo para hacer una investigación sicológica poco ética.

Ellos deberían tomar esas decisiones basados en Eeeh....

Lo que sea que hacían antes, que probablemente era ético ¿no?

- La Inteligencia Artificial es una herramienta
- La información (y los datos) son poder



“Ser cultos para ser libres” J. Martí



- <https://meta.wikimedia.org/wiki/User:Diego> (WMF)