

Seja Feliz Programando em Python

about.me/fmasanori





Sarah VCH

Investigating Happiness With Python

last run 6 days ago · Python notebook · 817 views

using data from [World Happiness Report 2016](#) · Public

▲
12

voters

[Notebook](#)

Code

Input

Comments (5)

Log

Versions (15)

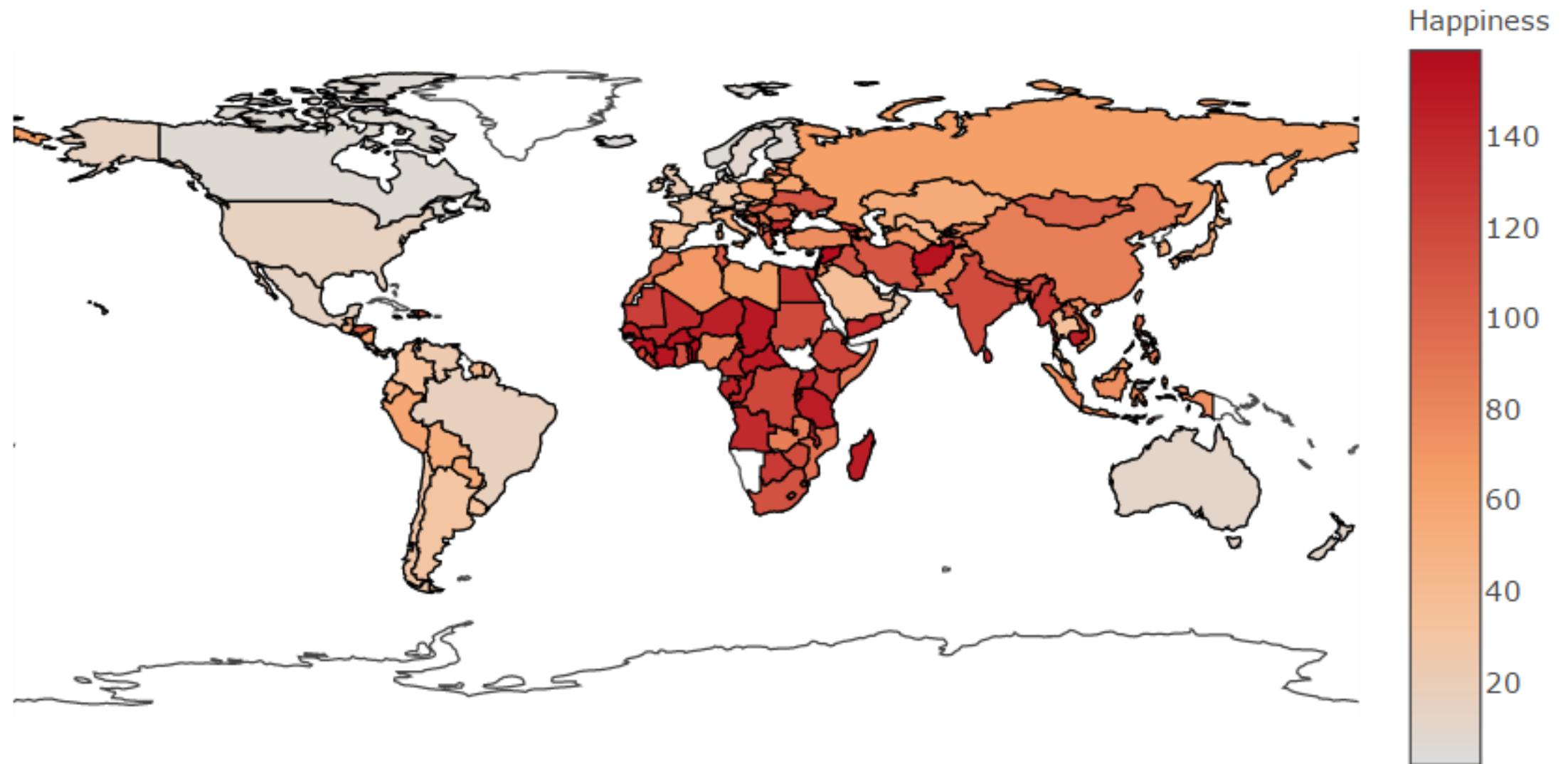
Forks (11)

[Fork Notebook](#)

Notebook

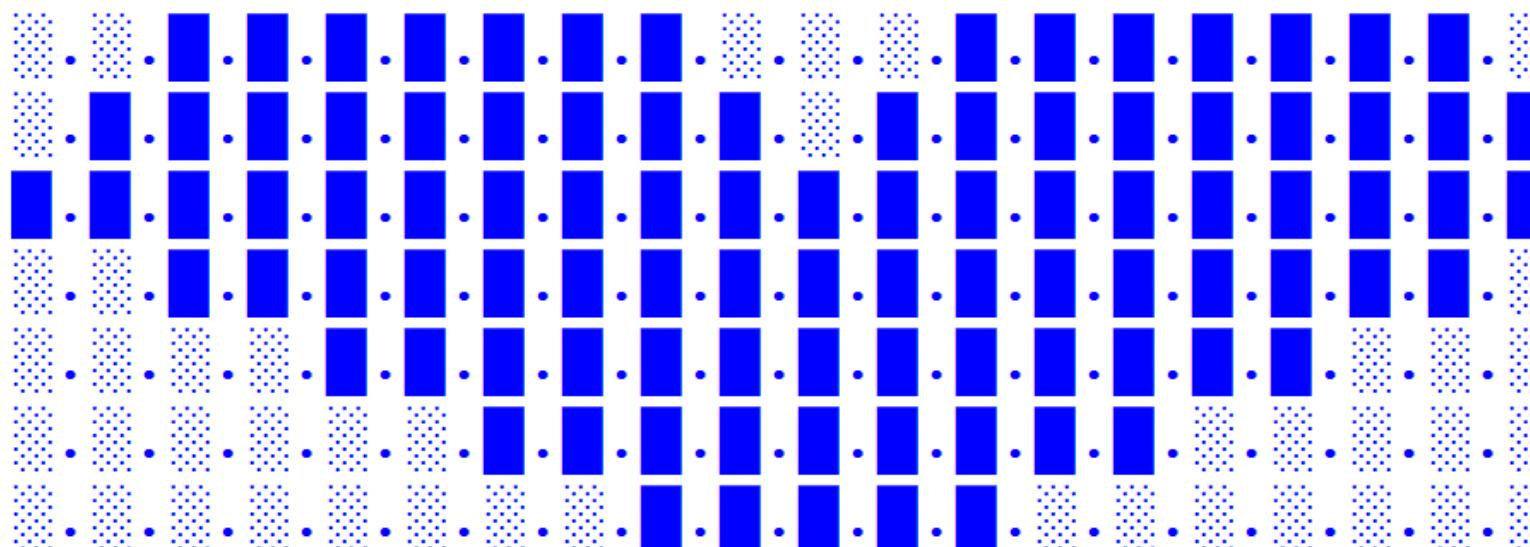
<https://www.kaggle.com/sarahvch/investigating-happiness-with-python>

Global Happiness

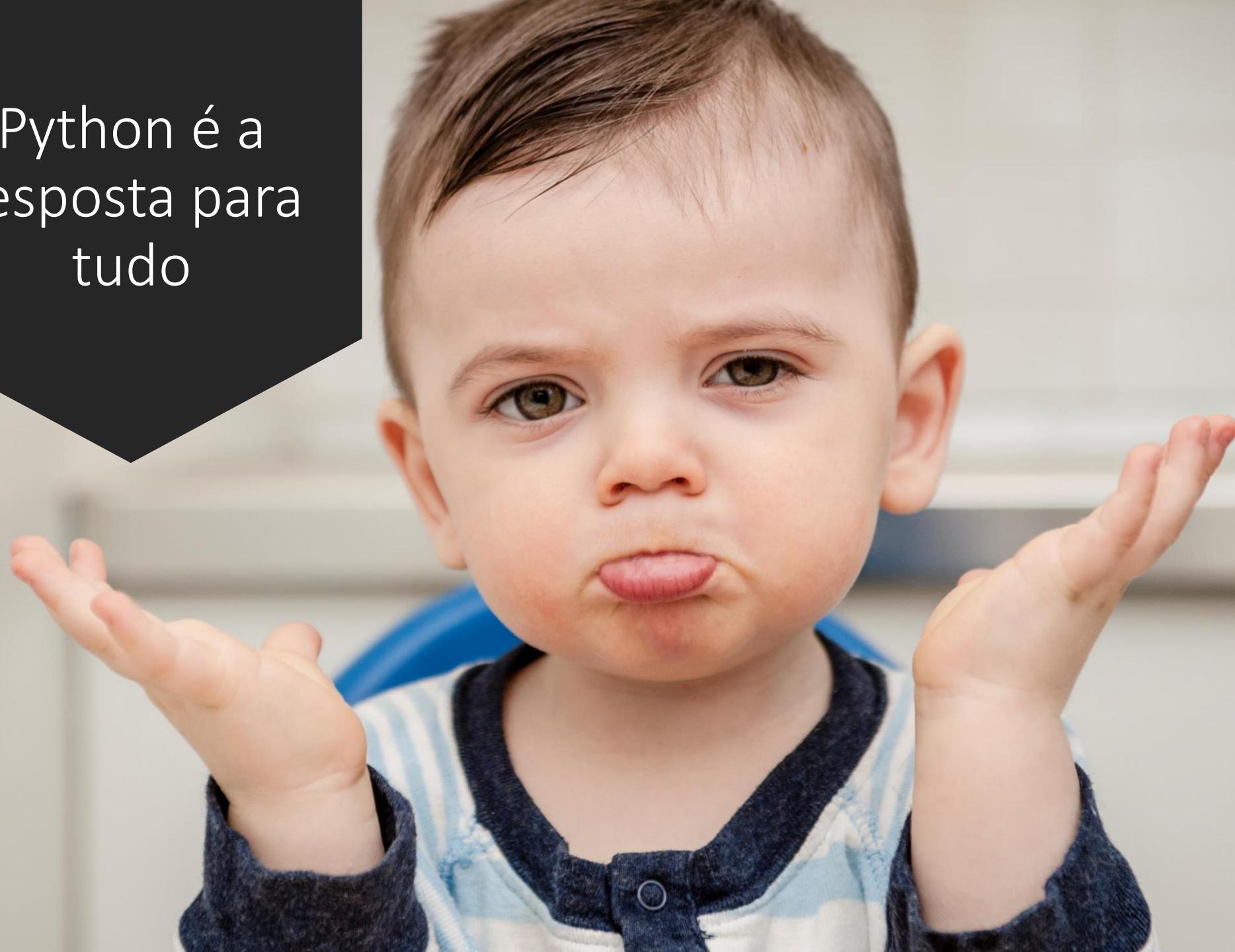


Python é amor

```
>>> print((lambda r: '\n'.join('.'.join('█' if (y<r and ((x-r)**2+(y-r)**2<=r**2 or (x-3*r)**2+(y-r)**2<=r**2)) or (y>=r and x+r>=y and x-r<=4*r-y) else ' .' for x in range(4*r)) for y in range(1,3*r,2))))(5))
```



Python é a
resposta para
tudo



```
>>> from random import randint
>>> for k in range(3): print (randint(1, 100))

42
42
42
>>> a = int42(13)
>>> b = int42(7)
>>> a + b
42
>>> print (a)
42
>>> print (b)
42
>>> fib(666)
42
>>> fat(666)
42
```

```
>>> w = 'Mundo'  
>>> h = 'Alô'  
>>> f'{h} {w}'  
'Alô Mundo'  
>>>  
>>> f[{h}, {w}]  
['Alô', 'Mundo']  
>>>  
>>> f({h}, {w})  
('Alô', 'Mundo')  
>>>
```

Python 3.7 ?

Mantenha o bom humor
pip install ftuple

Coconut: Python funcional

```
>>> "hello, world!" |> print
hello, world!
>>> (x) -> x ** 2
<function <lambd> at 0x0338C228>
>>> range(10) |> map$(pow$(?, 2)) |> list
[0, 1, 4, 9, 16, 25, 36, 49, 64, 81]
>>> match [head] + tail in [0, 1, 2, 3]:
    print(head, tail)
0 [1, 2, 3]
>>> {"list": [0] + rest} = {"list": [0, 1, 2, 3]}
>>> rest
[1, 2, 3]
```

```
def anagrama(s1, s2):
    return sorted(s1) == sorted(s2)

def primo(n):
    return not any(n % k == 0 for k in range(2, n))

>>> anagrama('aberto', 'rebato')
True
>>> primo(17)
True
>>> primo(42)
False
```

Zen do Python ?

```
n = 908007000
print (len(str(n)) - len(str(int(str(n) [::-1]))))
print (len(str(n)) - len(str(n).rstrip('0')))
from itertools import takewhile
l = str(n).split('0')
print(len(list(takewhile(lambda x: not x, reversed(l)))))
import re
print(len(re.findall('0*$', str(n))[0]))
f = lambda m:(lambda g:g(m, g))(lambda
                                n, f:1 + f(n//10, f)
                                if n%10 == 0 else 0)
print (f(n))
f = lambda x, y: y if x % 10 != 0 else f(x//10,y+1)
print (f(n, 0))
f = lambda n : 0 if n%10 else 1 + f(n//10)
print (f(n))
```

Zen do Python ?

```
s1 = 'abacate'  
s2 = 'palmeiras'  
f1 = len(s1)  
f2 = len(s2)  
s = ''  
  
for k in range(min(f1, f2)):  
    s += s1[k]  
    s += s2[k]  
k += 1  
s += s1[k:] if f1 > f2 else s2[k:]  
print(s)  
  
from itertools import chain, zip_longest  
print (''.join(''.join(x) for x in  
              zip_longest(s1, s2, fillvalue='')))  
print (''.join(chain.from_iterable(  
              zip_longest(s1, s2, fillvalue='')))  
print (''.join(chain(*zip_longest(s1, s2, fillvalue='')))
```



The most common fault in computer classes is to emphasize the rules of specific programming languages, instead of to emphasize the algorithms that are being expressed in those languages. It's bad to dwell on form over substance. D. Knuth



Simples sem ser
simplório

Python is the "most
powerful language
you can still read"
(Paul Dubois)

A grid of 24 wooden boxes, each containing a yellow rubber duck. In the second column from the left, the second box from the top contains a single blue rubber duck instead of a yellow one. This visual metaphor represents the concept of inclusion, where one individual of a different kind is accepted among a group of similar individuals.

Inclusão

“Estou mais feliz por saber que sou uma pessoa
comum que conseguiu votos pra entrar...”



Paola Katherine diretora PSF

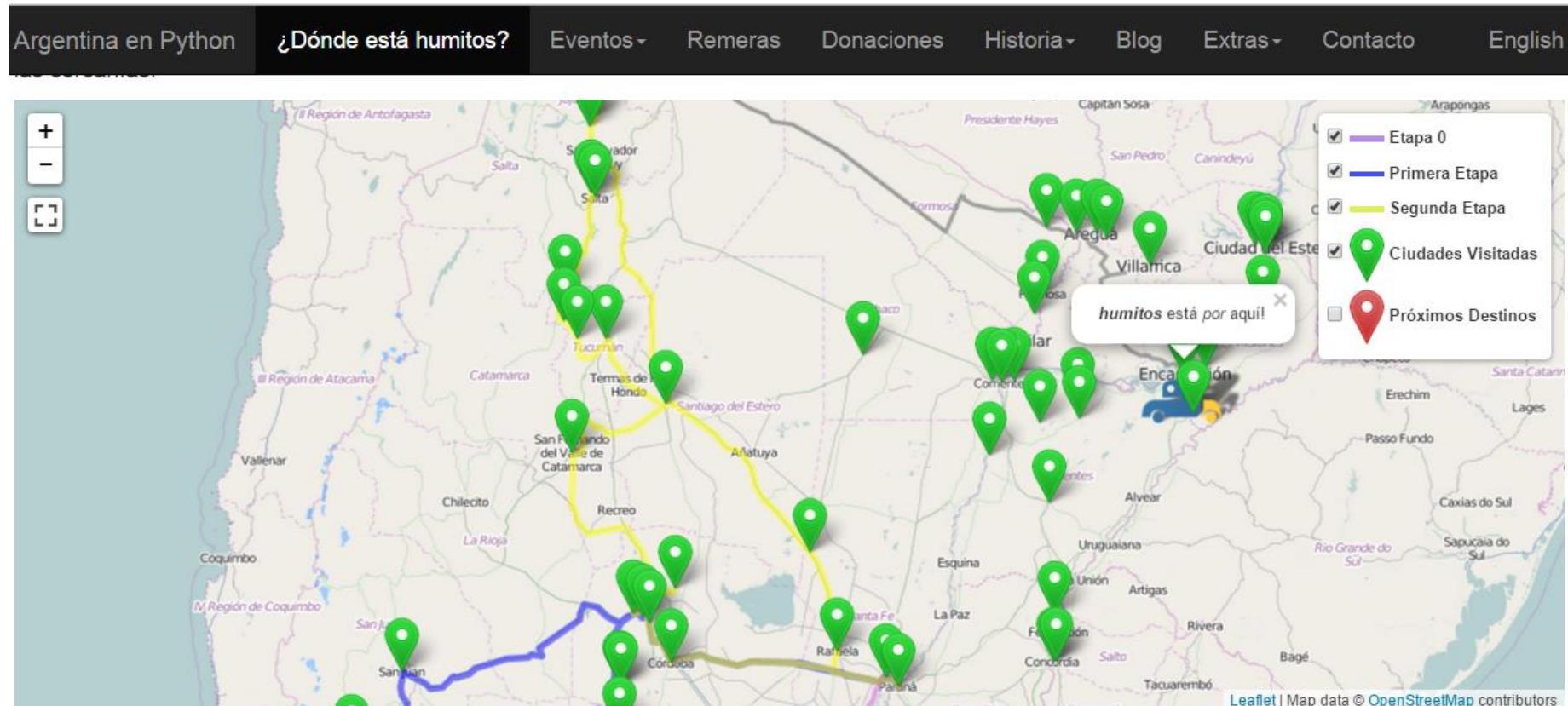


LGBT People Open Space - PyCon

Manuel Kaufmann and Johanna Sanchez



Argentina en Python



<http://argentinaenpython.com.ar/en/>

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IRAN PYCON

Iran University of Science and Technology

13 May 2016





62 workshops
11 countries

Tunisia 4



Nigeria 31

Ghana 2

Republic of the Congo 1

Namibia 2

Sudan 4

Uganda 6

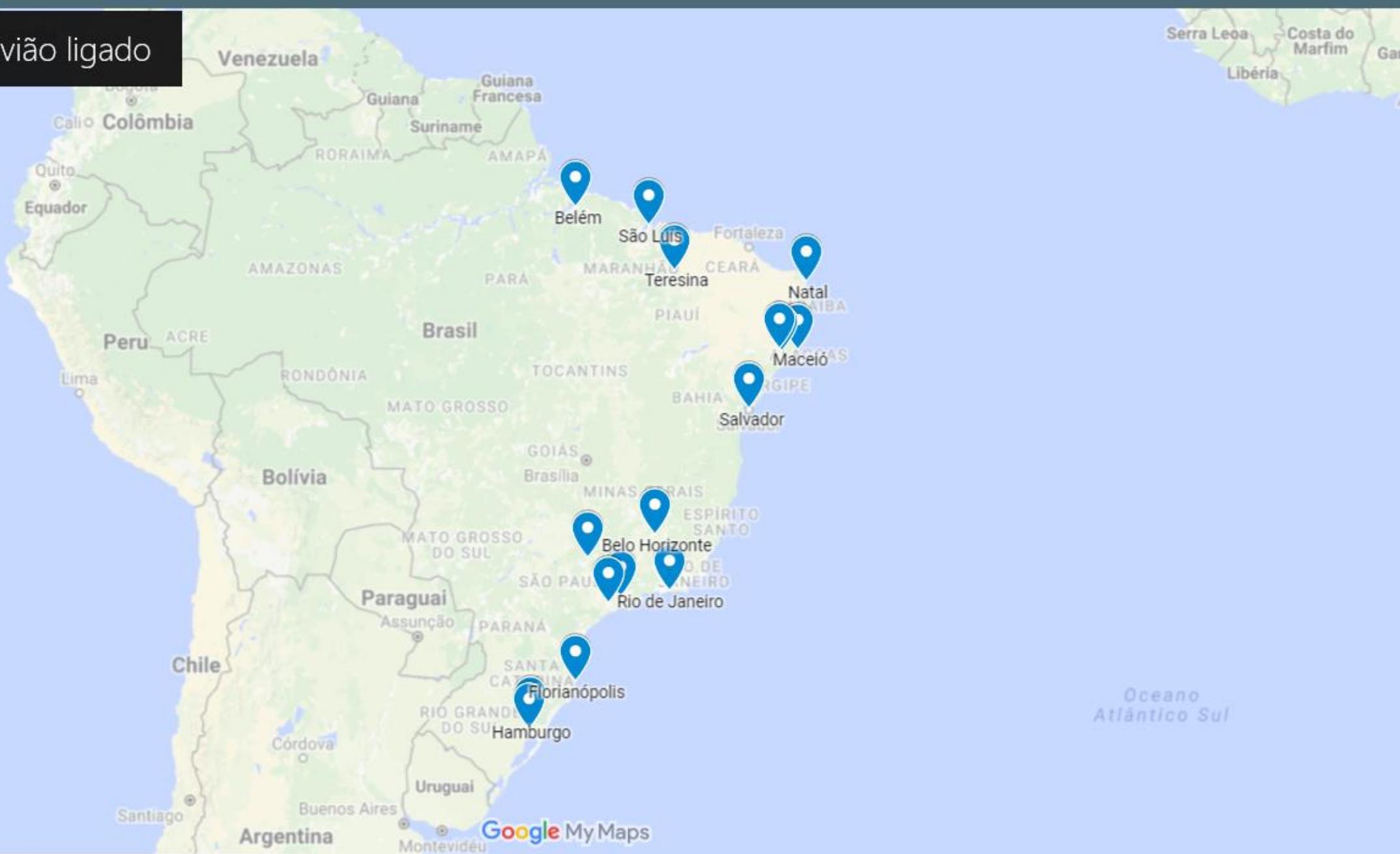
Kenya 4

Zimbabwe 6

Madagascar 1

South Africa 4

modo avião ligado





Unidade na diversidade

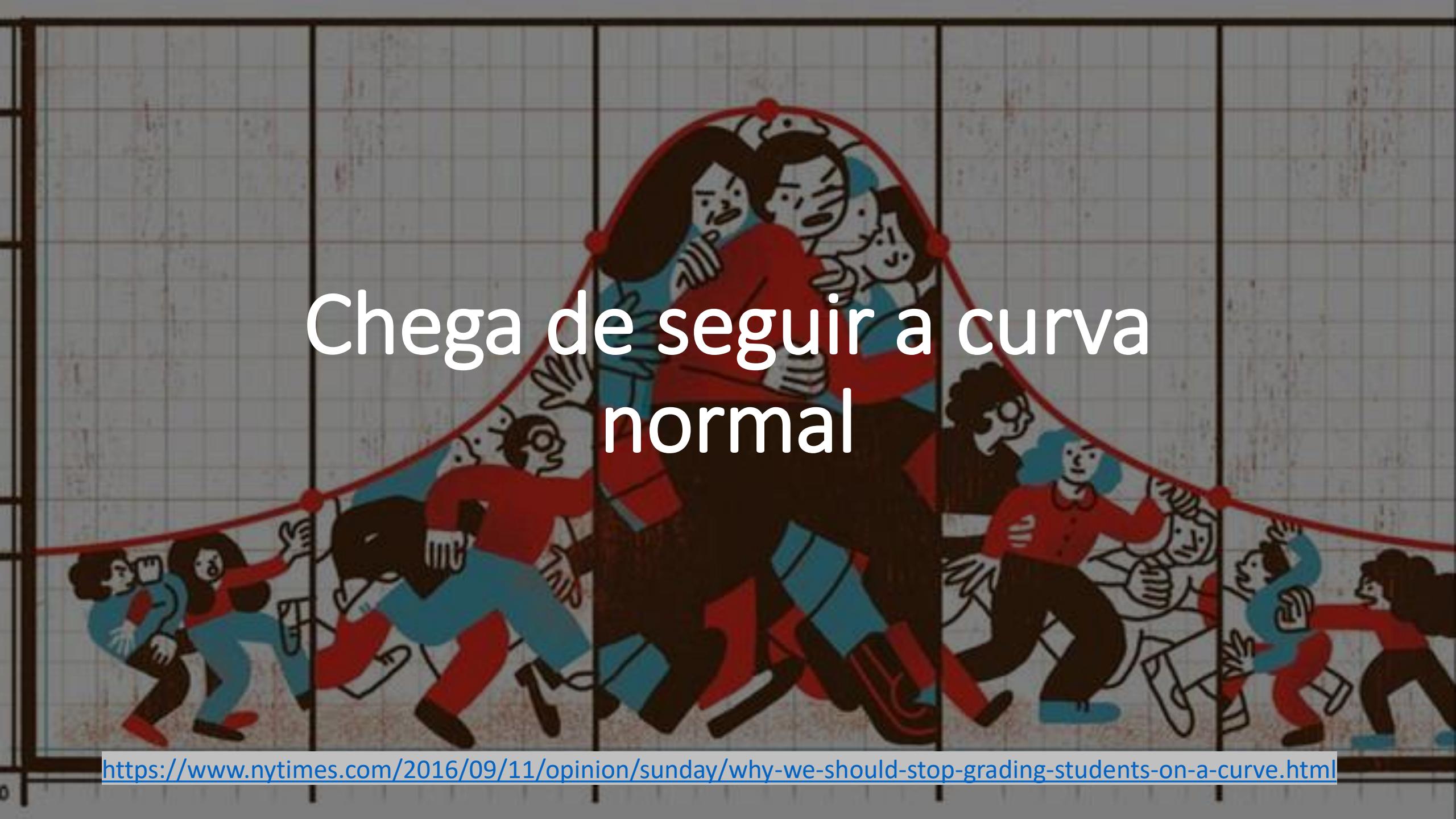
“Come for the language, stay for the community” Brett Canon



"A language that doesn't affect the way you think about programming, is not worth knowing." Alan Perlis

Meus alunos



A satirical illustration depicting a bell curve as a living entity. The curve is personified with a face, arms, and legs, and is being driven by a large truck. The truck is碾压 (run over) several people of various ethnicities and ages who are running away from the path of the curve. The scene is set against a background of a grid, suggesting graph paper.

Chega de seguir a curva
normal

Seletiva Hackaton Facebook (45min)

Dado dois números inteiros n e k positivos, gerar os binários entre 0 e $2^{**n} - 1$, inclusive.

Ordenar em ordem descrescente de acordo com o número de 1s existentes

Retornar o k-ésimo elemento da lista

Exemplo, para $n = 3$ e $k = 5$ a lista fica `['0b111', '0b11', '0b101', '0b110', '0b1', '0b10', '0b100', '0b0']`

E o quinto elemento é '0b1'

```
def hack(n, k):
```

```
def uns(s): return s.count('1')
```

b = []

```
for x in range(2**n): b.append(bin(x))
```

```
b.sort(key=uns, reverse=True)
```

```
return b[k-1]
```

```
def hack1(n, k):
```

```
return sorted([bin(x) for x in range(2**n)],
```

```
key=lambda s: s.count('1'),
```

`reverse=True) [k-1]`

```
print (hack1(3, 5))
```

Salários da USP acima do teto (amostra)

Arrigo Leonardo Angelini: 68241.39

Sergio de Iudicibus: 53714.0

Boris Fausto: 50766.72

Affonso Renato Meira: 47719.18

Antonio Morales: 45560.14

Sonia Apparecida de Siqueira: 45560.14

Jose Moacyr Vianna Coutinho: 44865.81

Maria Sylvia Carvalho Franco: 44865.81

Maria T. Schorer Petrone: 43581.47

Jose Barbosa: 43401.1

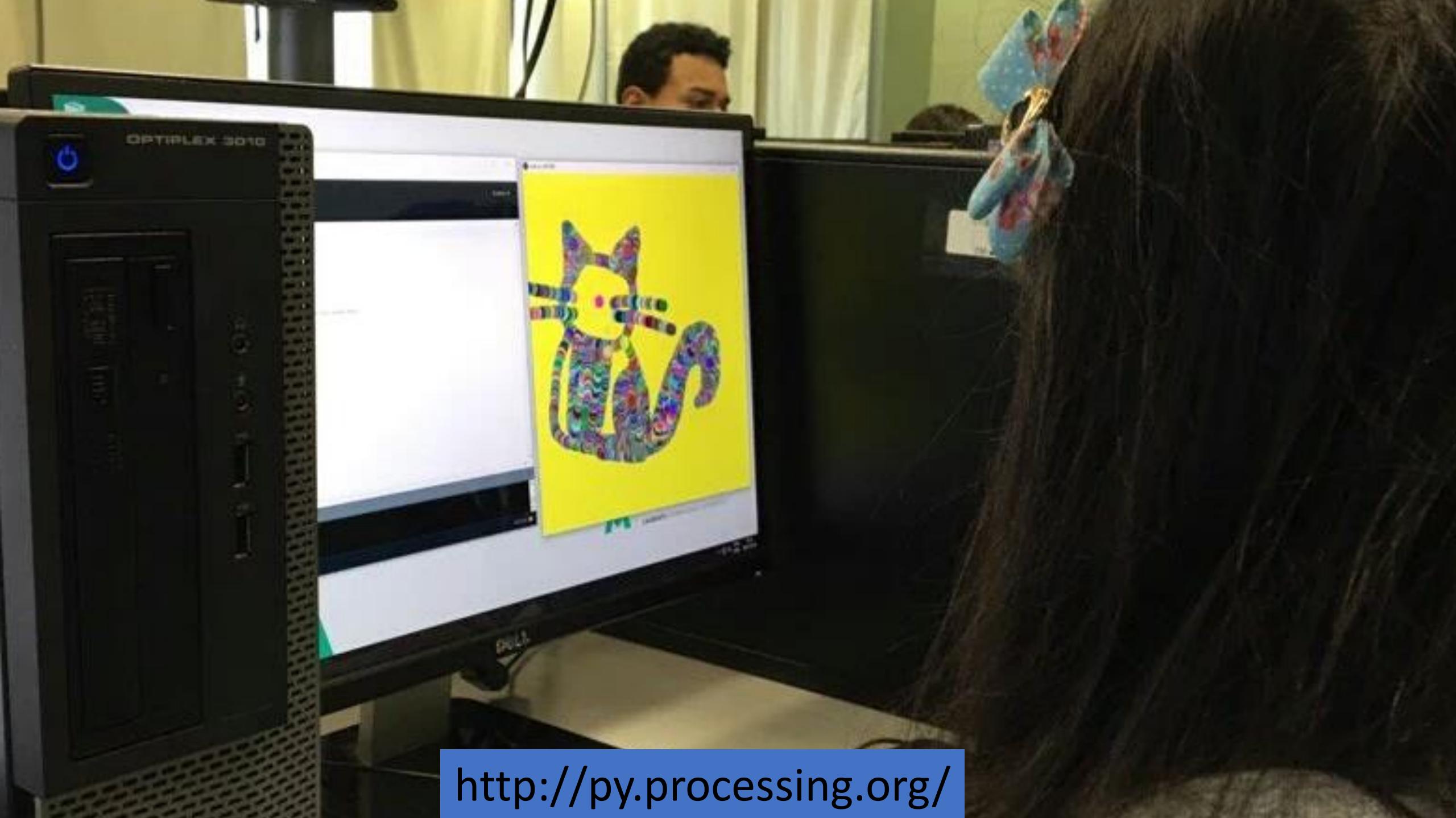
Giorgio Moscati: 40719.4

Mario Demar Perez: 40120.4

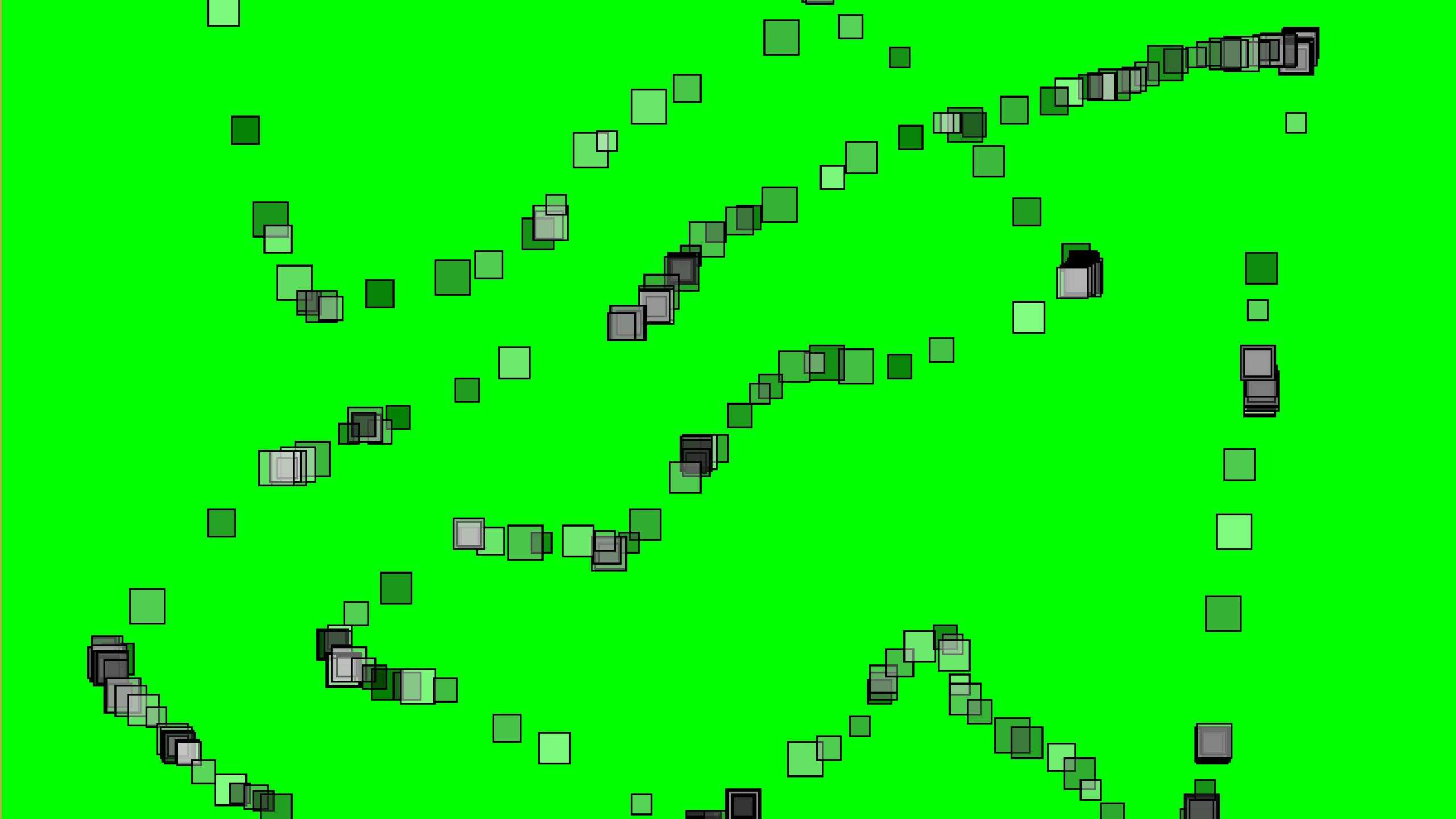
Massaud Moises: 40120.4



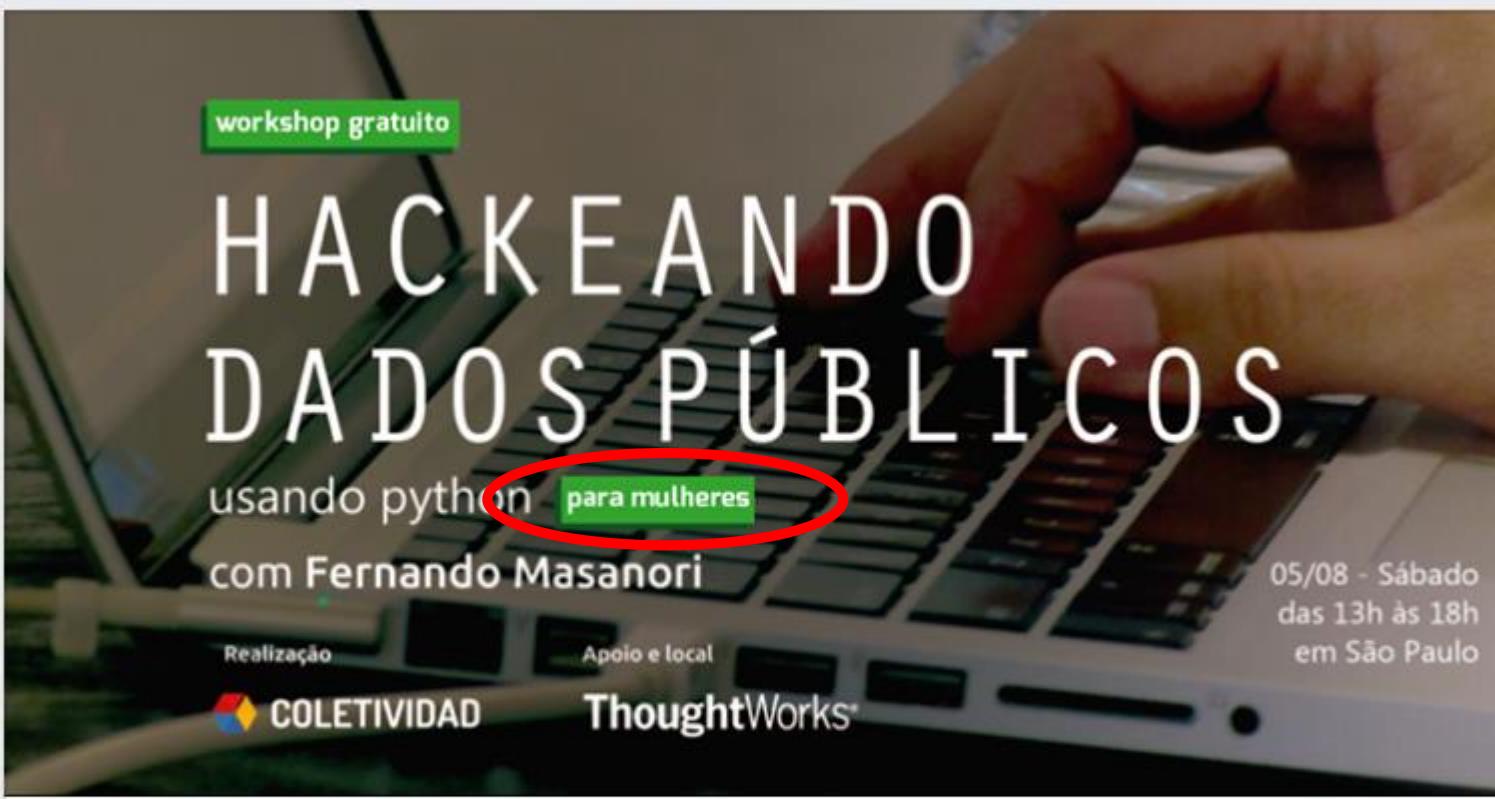
```
import random
girls = '''Júlia Sophia Isabella Manuela Giovanna Alice Laura Luiza Beatriz
Mariana Yasmin Gabriela Rafaela Isabelle Lara Letícia Valentina Nicole
Sarah Vitória Isadora Lívia Helena Lorena Clara Larissa Emanuelly Heloisa
Marina Melissa Gabrielly Eduarda Rebeca Amanda Alicia Bianca Lavinia
Fernanda Ester Carolina Emily Cecília Pietra Milena Marcela Lais Natália
Maria Bruna Camila Luana Catarina Olivia Agatha Mirella Sophie Stella Stefânia
Isabel Kamilly Elisa Luna Eloá Joana Mariane Bárbara Juliana Rayssa Alana
Caroline Brenda Evelyn Débora Raquel Maitê Ana Nina Hadassa Antonella Jennifer
Betina Mariah Sabrina'''.split()
girls.sort()
print (' '.join(girls))
sorteado = random.choice(girls)
chute = ''
while chute != sorteado:
    chute = input('Chute: ')
    if chute == sorteado:
        print ('Ganhou!')
    elif chute > sorteado:
        print ('Alto')
    else:
        print ('Baixo')
print ('Fim do Jogo!')
```



<http://py.processing.org/>







AGO

5

Curso: Hackeando Dados Públicos usando Python

298 comparecerão · 2,3 mil interessados

[Ver todos](#)



Ana Carolina, Henrique e outros 18 amigos confirmaram presença



Cerveja com Dados



HOLTA

ÉPOCA

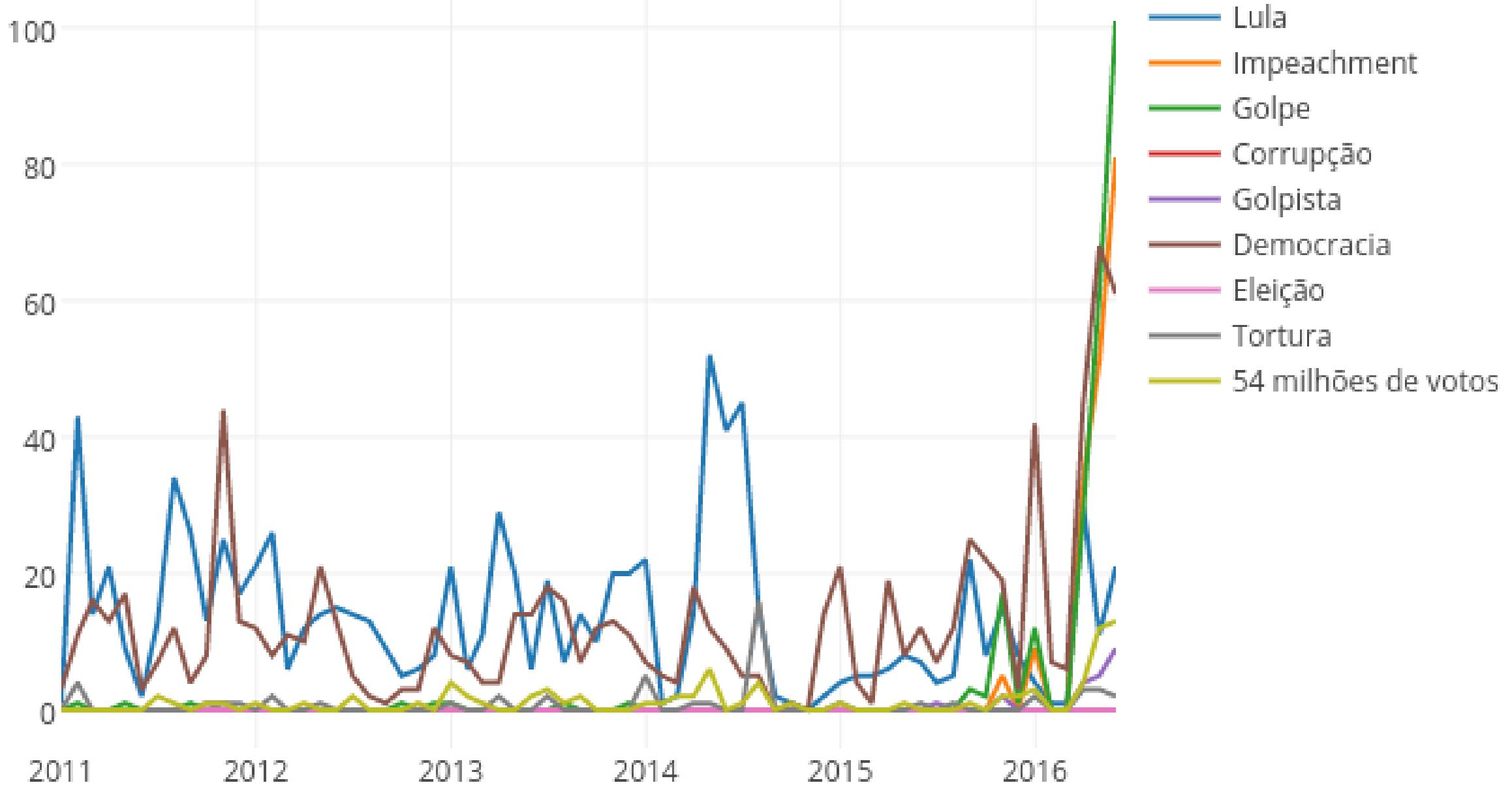


1

Os discursos de Dilma

Durante os 64 meses em que ocupou o Palácio do Planalto, os termos que Dilma Rousseff escolheu para se comunicar disseram muito sobre como o país foi mudando no período. Época NEGÓCIOS criou um algoritmo que analisou os quase 950 discursos que Dilma proferiu como presidente, entre dezembro de 2010,

<http://discursosdilma.epocanegocios.globo.com/>



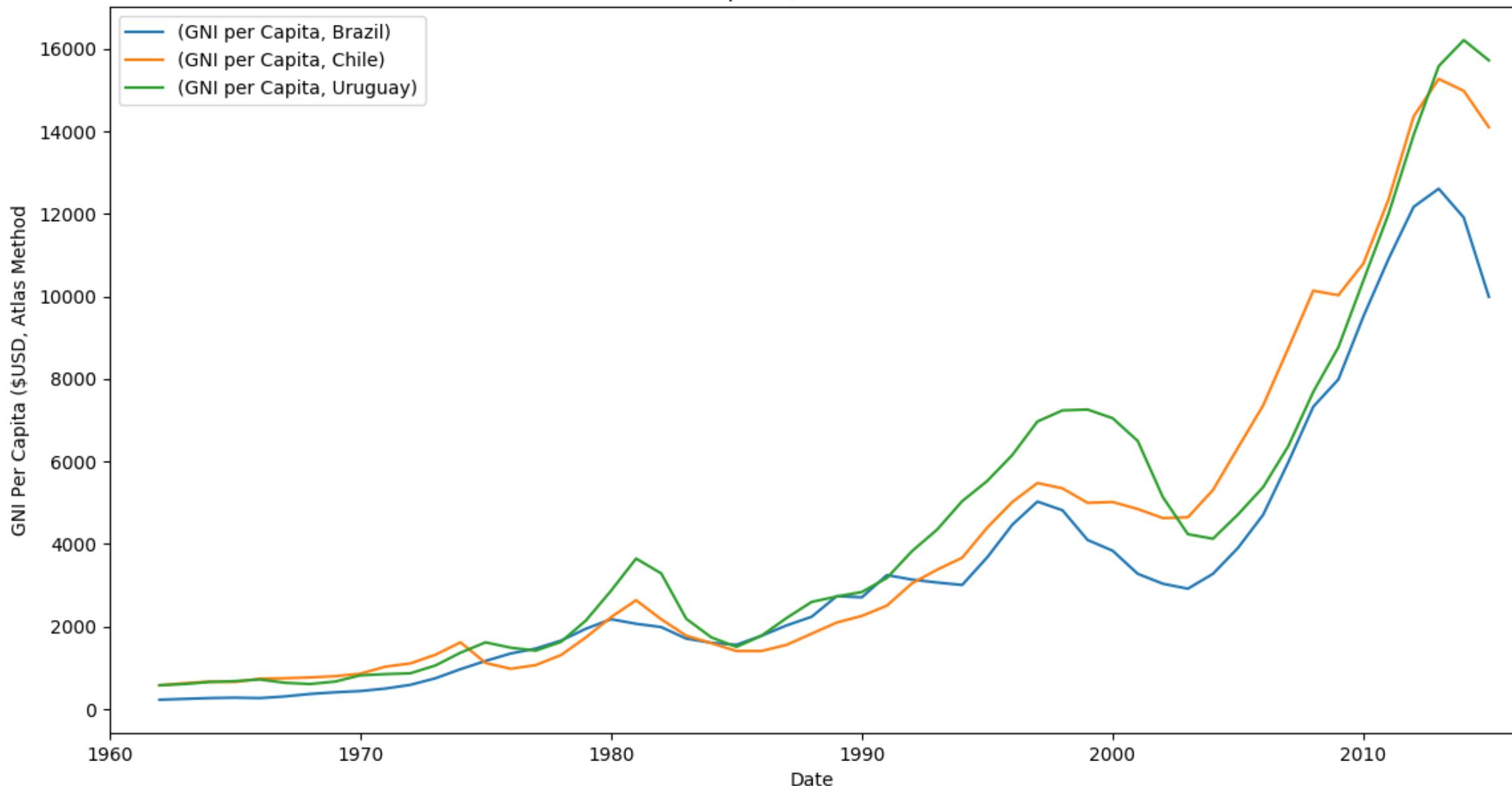
```
import wbdata
import matplotlib.pyplot as plt
#https://blogs.worldbank.org/opendata/accessing-world-bank-data-apis-python-r
countries = ["CL", "UY", "BR"]
indicators = {'NY.GNP.PCAP.CD': 'GNI per Capita'}

df = wbdata.get_dataframe(indicators, country=countries, convert_date=False)

dfu = df.unstack(level=0)

dfu.plot()
plt.legend(loc='best')
plt.title("GNI Per Capita ($USD, Atlas Method)")
plt.xlabel('Date')
plt.ylabel('GNI Per Capita ($USD, Atlas Method)')
plt.show()
```

GNI Per Capita (\$USD, Atlas Method)



```
import json
import requests
import pandas as pd
url = 'http://www.omdbapi.com/?t=Game of Thrones&Season=6&apikey='
data = requests.get(url).content
data = json.loads(data)
df = pd.DataFrame.from_dict(data['Episodes'])
print(df)
```

	Episode	Released	Title	imdbID	imdbRating
0	1	2016-04-24	The Red Woman	tt3658014	8.5
1	2	2016-05-01	Home	tt4077554	9.5
2	3	2016-05-08	Oathbreaker	tt4131606	8.8
3	4	2016-05-15	Book of the Stranger	tt4283016	9.2
4	5	2016-05-22	The Door	tt4283028	9.7
5	6	2016-05-29	Blood of My Blood	tt4283054	8.4
6	7	2016-06-05	The Broken Man	tt4283060	8.6
7	8	2016-06-12	No One	tt4283074	8.3
8	9	2016-06-19	Battle of the Bastards	tt4283088	9.9
9	10	2016-06-26	The Winds of Winter	tt4283094	9.9

SWAPI

The Star Wars API

All the Star Wars data you've ever wanted:

Planets, Spaceships, Vehicles, People, Films and Species

Pokéapi^{V2 BETA}

The RESTful Pokémon API

Over 182,758,100 API calls received!

Be aware: URLs for Sprites have moved permanently! This is due to people abusing them and hot linking. Do not hotlink images.

Finally; all the Pokémon data you'll ever need, in one place, and easily accessible through a modern RESTful API.

<http://bit.ly/pyhappy>

Obrigado

Perguntas, curiosidades, etc?