R/Python 需要理由嘛?

DAMA 的自私传销 ;-)

Zoom.Quiet

#免责声明

一切资料来自网络互动挖掘
一切想法来自日常学习工作
一切体悟来自各种沟通交流
一切知识来自社区分享印证
一切经验来自个人失败体验

#PPT去死去死

幻灯

Presentation

#授权声明

录音

#是也乎

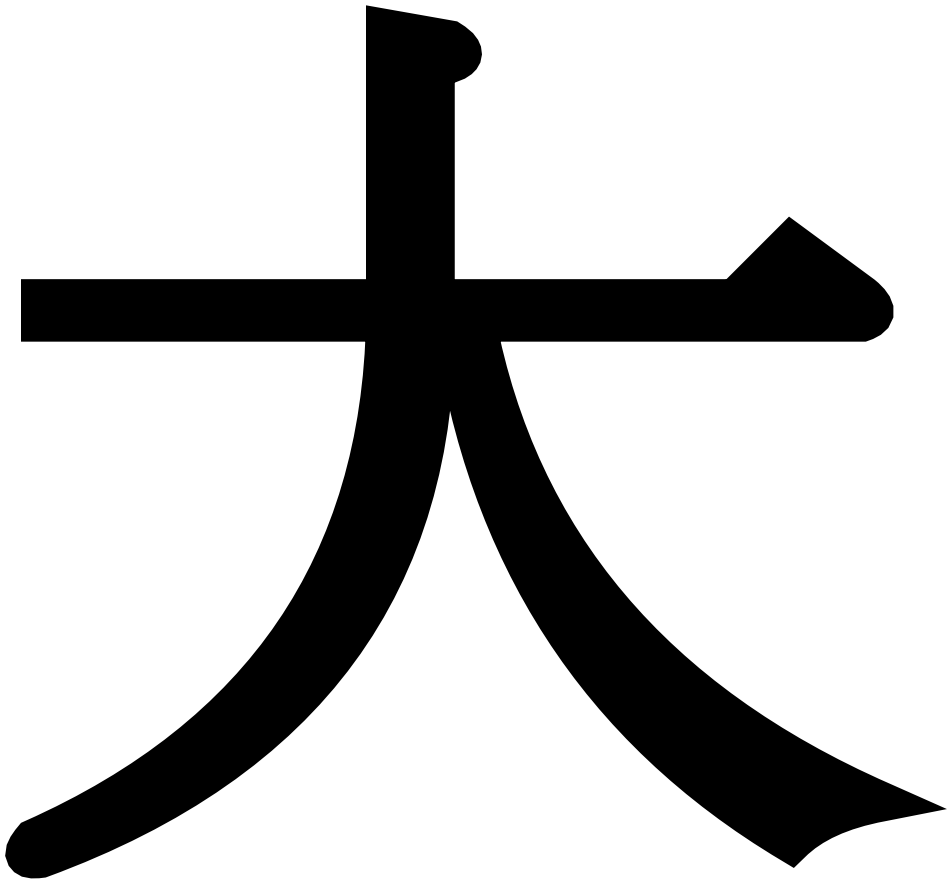
(^.^)

#风格提醒

高橋流

Takahashi

#高橋流



#高橋流

#高橋流

快

#高橋流

很快

#高橋流

非常快

#所以

听

#DAMA

大妈

#Dama dama 黇鹿(tiānlù)

#DAMA

15+

#DAMA 自证:发现 gmail...

200

#DAMA: 2003~

CZUG

#DAMA: 2004~

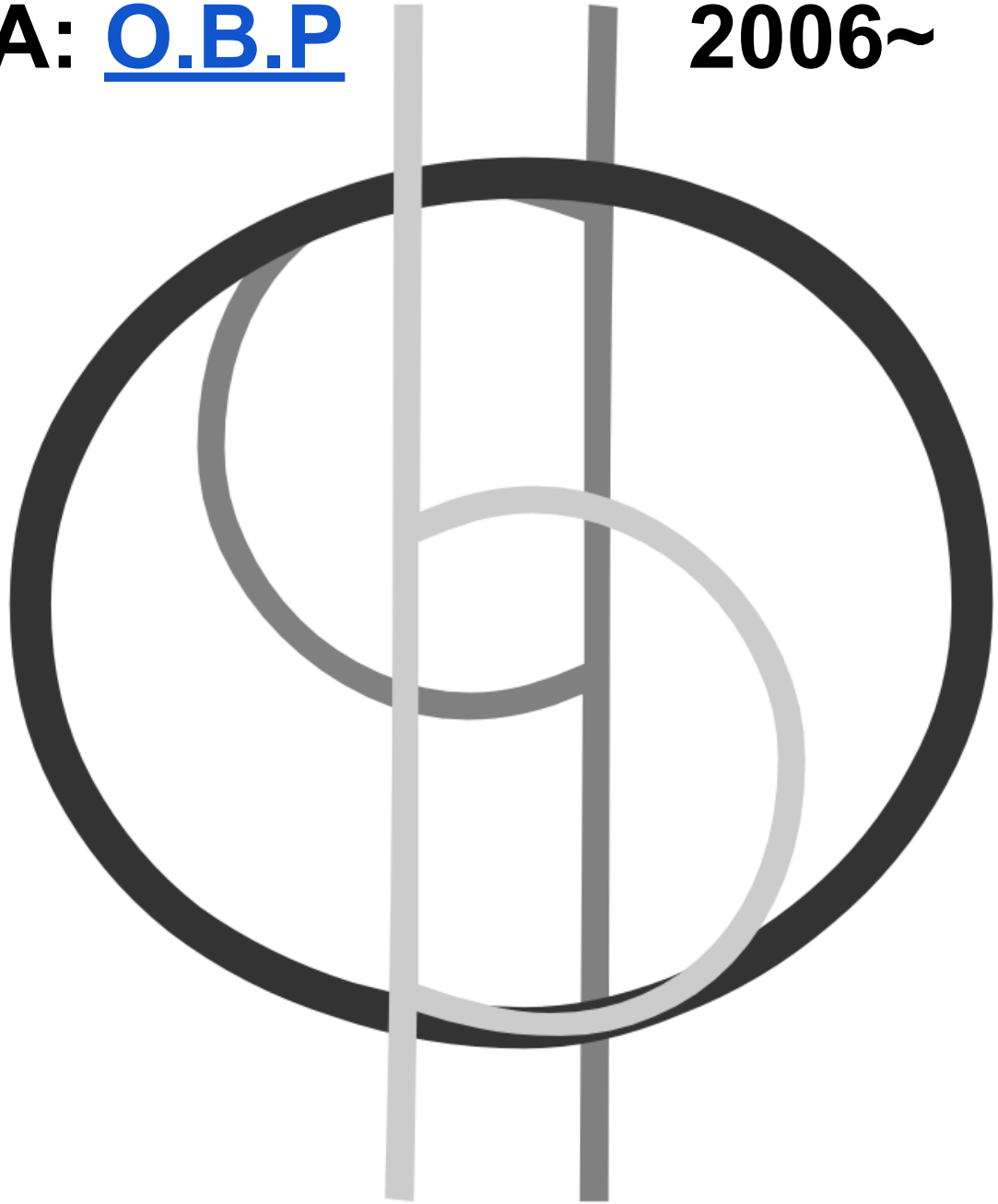
啄木鸟

Python技术社区

#DAMA: 2005~

CPyUG

#DAMA: O.B.P 2006~



#DAMA: 2006~ Zeuux

哲思

#DAMA: 2007~

ECUG

#DAMA: 2008~

教育大发现

sociallearnlab

#DAMA: 2010~

开源卫士

code.ijinshan

#DAMA: 2011~

OpenResty

Nginx with Lua

#DAMA: 2013~

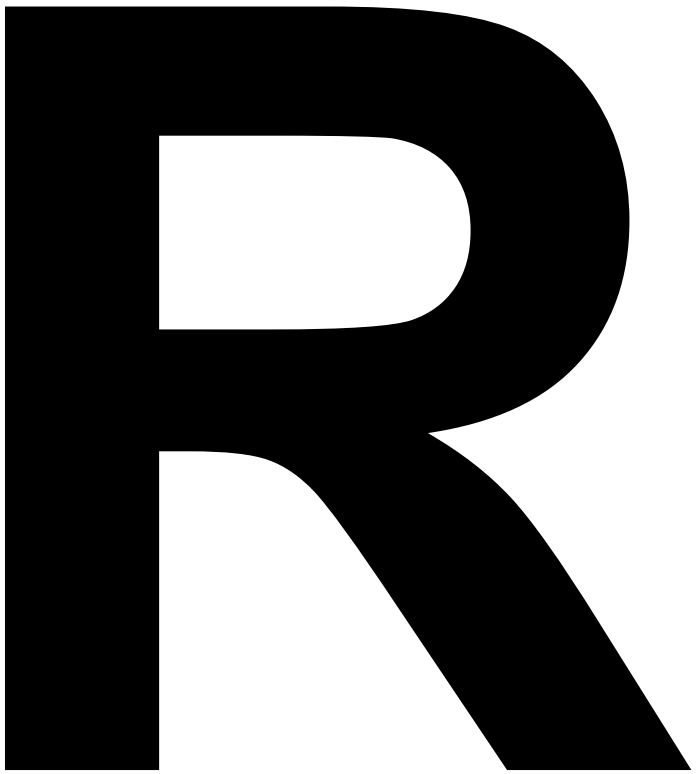
GDG Zhuhai

gdg livin zhuhai life ;-)

Google Developers 珠海谷歌开发者社区

#感谢...

什么是....



R是....

游乐场

R vs ...

SAS

SPSS

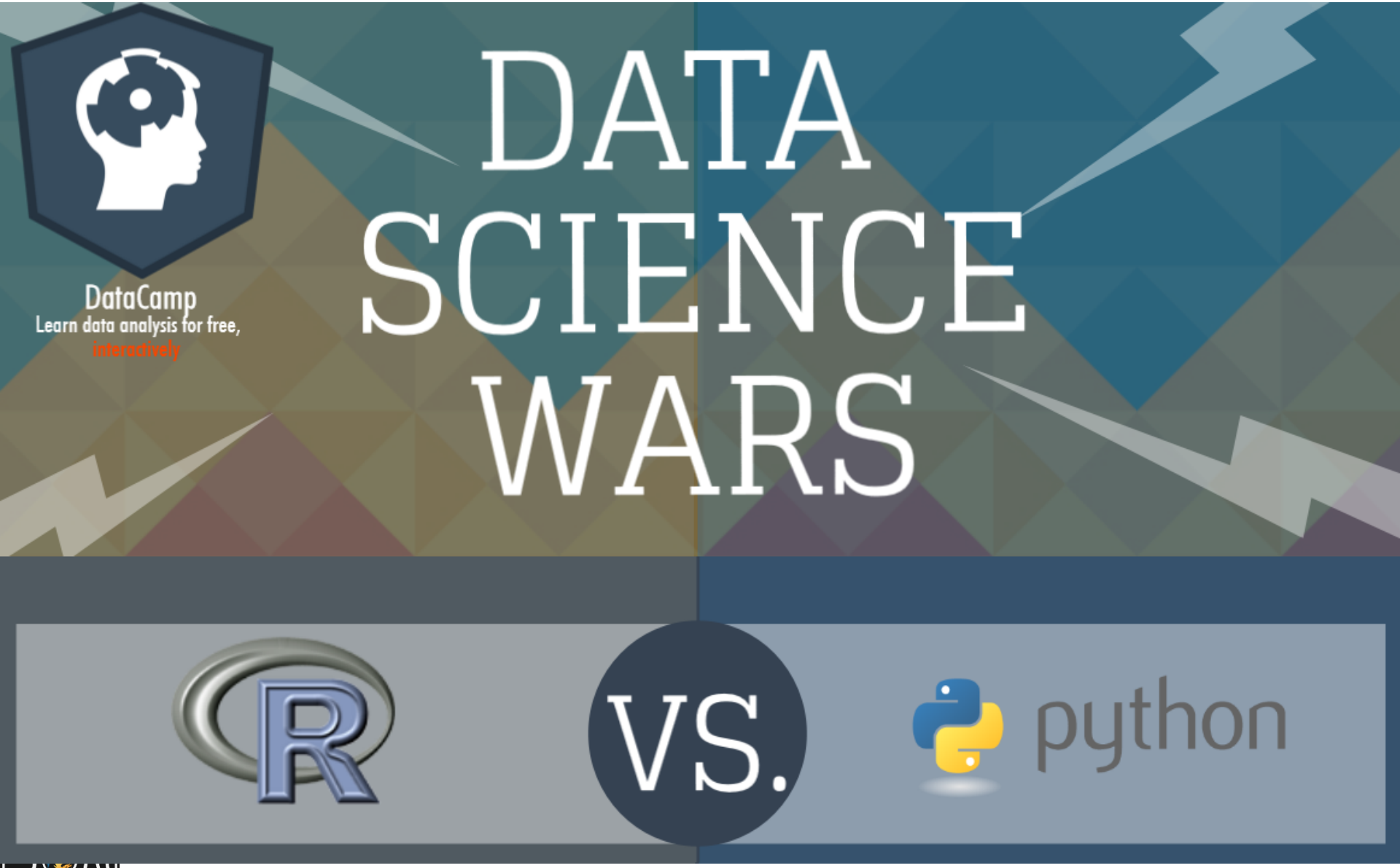
R vs ..

Julia

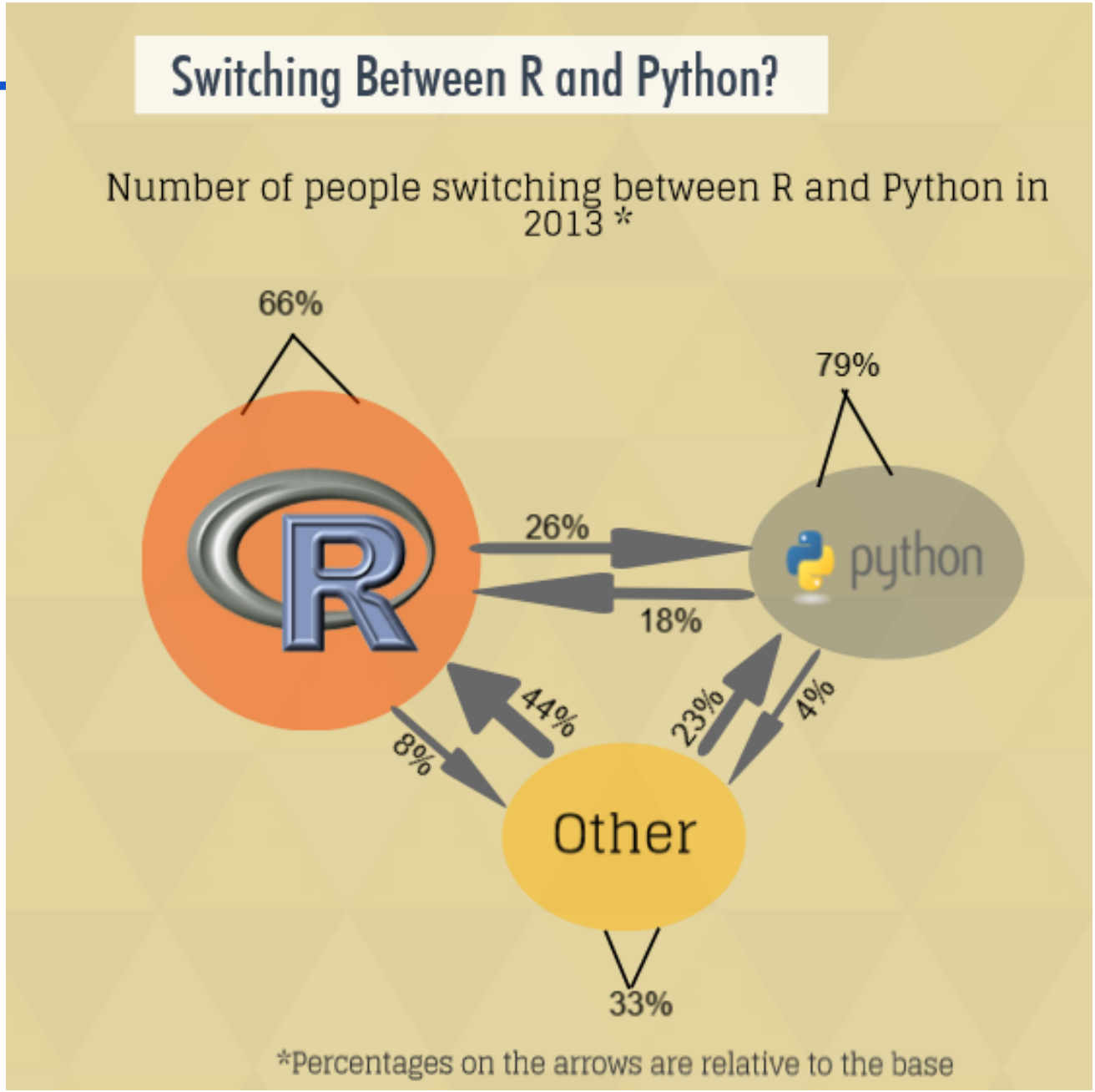
什么是....

Py

Py vs R


DataCamp
Learn data analysis for free,
interactively
DATA
SCIENCE
WARS
VS.
python

Py vs

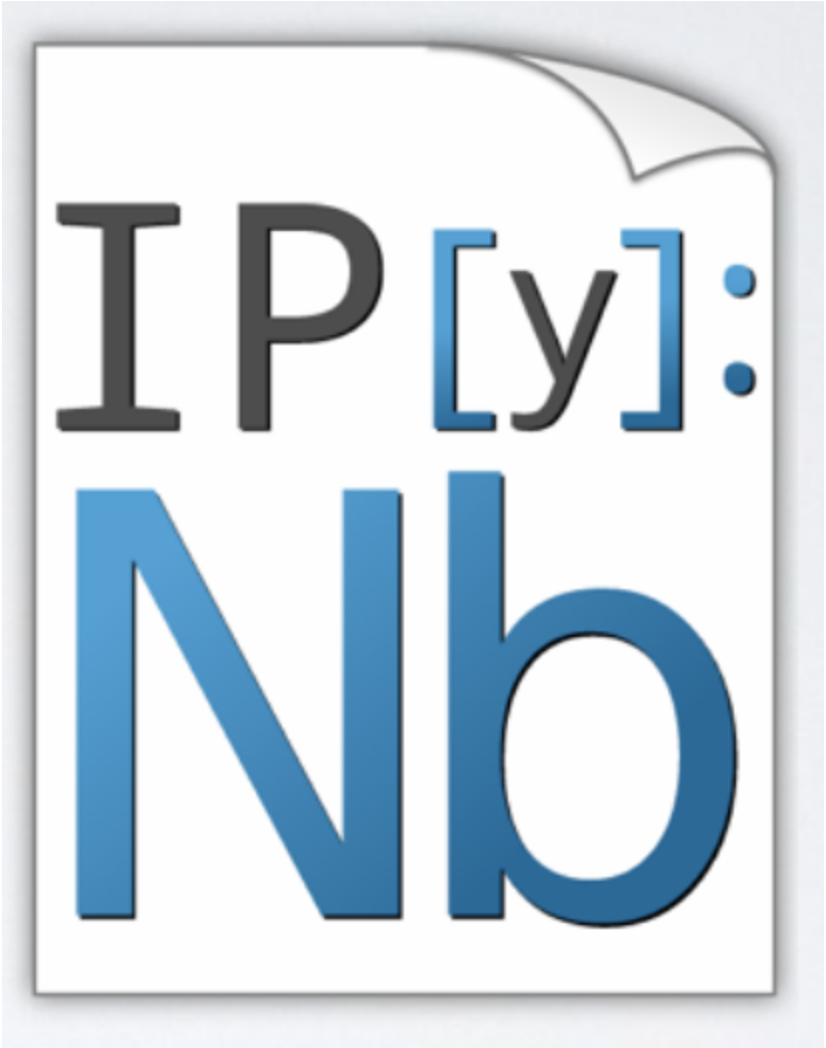


Py+R=

#那么...

IP[y]:

IP[y]: + notebook

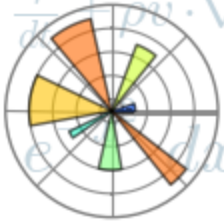


#可分享的... nbviewer

游乐场

IP[y]: 的伙伴们

Pandas



matplotlib

numpy

Figure 1

zoom rect

matplotlib_logo.py (~) - gedit

Datei Bearbeiten Ansicht Suchen Werkzeuge Dokumente Hilfe

Öffnen Speichern Rückgängig

matplotlib_logo.py

```
 1 import matplotlib as mpl
 2 import matplotlib.pyplot as plt
 3 from math import *
 4
 5 t, w, r = zip((0.1, 0.4, 1), (0.9, 0.3, 5),
 6 (1.7, 0.5, 7), (2.7, 0.6, 6), (3.5, 0.3, 3),
 7 (4.5, 0.4, 4), (5.3, 0.3, 7))
 8
 9 ax = plt.subplot(111, polar=True)
10 bars = ax.bar(t, r, width=w, bottom=0.0, lw=2)
11
12 for r, bar in zip(r, bars):
13     bar.set_facecolor(plt.cm.jet(r / 9.))
14     bar.set_alpha(0.7)
15
16 tic = mpl.ticker
17 no_labels = mpl.ticker.NullFormatter()
18 ax.yaxis.set_major_locator(tic.MultipleLocator(2))
19 ax.xaxis.set_major_formatter(no_labels)
20 ax.yaxis.set_major_formatter(no_labels)
21 for l in ('xgridlines', 'ygridlines'):
22     plt.setp(plt.getp(ax, l), 'linestyle', '-')
23
24 plt.ylim(0, 8)
25 plt.show()
```

Python Tabulatorbreite: 4 Z. 11, Sp. 1 EINF

−6 −4 −2 0 2 4

Terminal

Datei Bearbeiten Ansicht Suchen Terminal Hilfe

```
user@pc ~ $ python matplotlib_logo.py
user@pc ~ $
```

pandas 透视表...

pandas pivot_table explained

	Account	Name	Rep	Manager	Product	Quantity	Price	Status
0	714466	Trantow-Barrows	Craig Booker	Debra Henley	CPU	1	30000	presented
1	714466	Trantow-Barrows	Craig Booker	Debra Henley	Software	1	10000	presented
2	714466	Trantow-Barrows	Craig Booker	Debra Henley	Maintenance	2	5000	pending
3	737550	Fritsch, Russel and Anderson	Craig Booker	Debra Henley	CPU	1	35000	declined
4	146832	Kiehn-Spinka	Daniel Hilton	Debra Henley	CPU	2	65000	won

```
pd.pivot_table(df,
    index=["Manager","Status"],
    columns=["Product"],
    aggfunc=[np.sum],
    values=["Price"],
    fill_value=0,
    margins=True,
    dropna=True)
```

Can also use a dictionary:
aggfunc={"Quantity":len,
"Price":[np.sum,np.mean]}

		sum				
		Price				
	Product	CPU	Maintenance	Monitor	Software	All
Manager	Status					
Debra Henley	declined	70000	0	0	0	70000
	pending	40000	10000	0	0	50000
	presented	30000	0	0	20000	50000
	won	65000	0	0	0	65000
Fred Anderson	declined	65000	0	0	0	65000
	pending	0	5000	0	0	5000
	presented	30000	0	5000	10000	45000
	won	165000	7000	0	0	172000
All		465000	22000	5000	30000	522000

pbpython.com

IP[y]: + ...

+graphviz
+D3.js

IP[y]: 3.*

IP[y]: 的角色

强化Py外壳

Jupter内核之一

并发Python

Jupyter 的使命

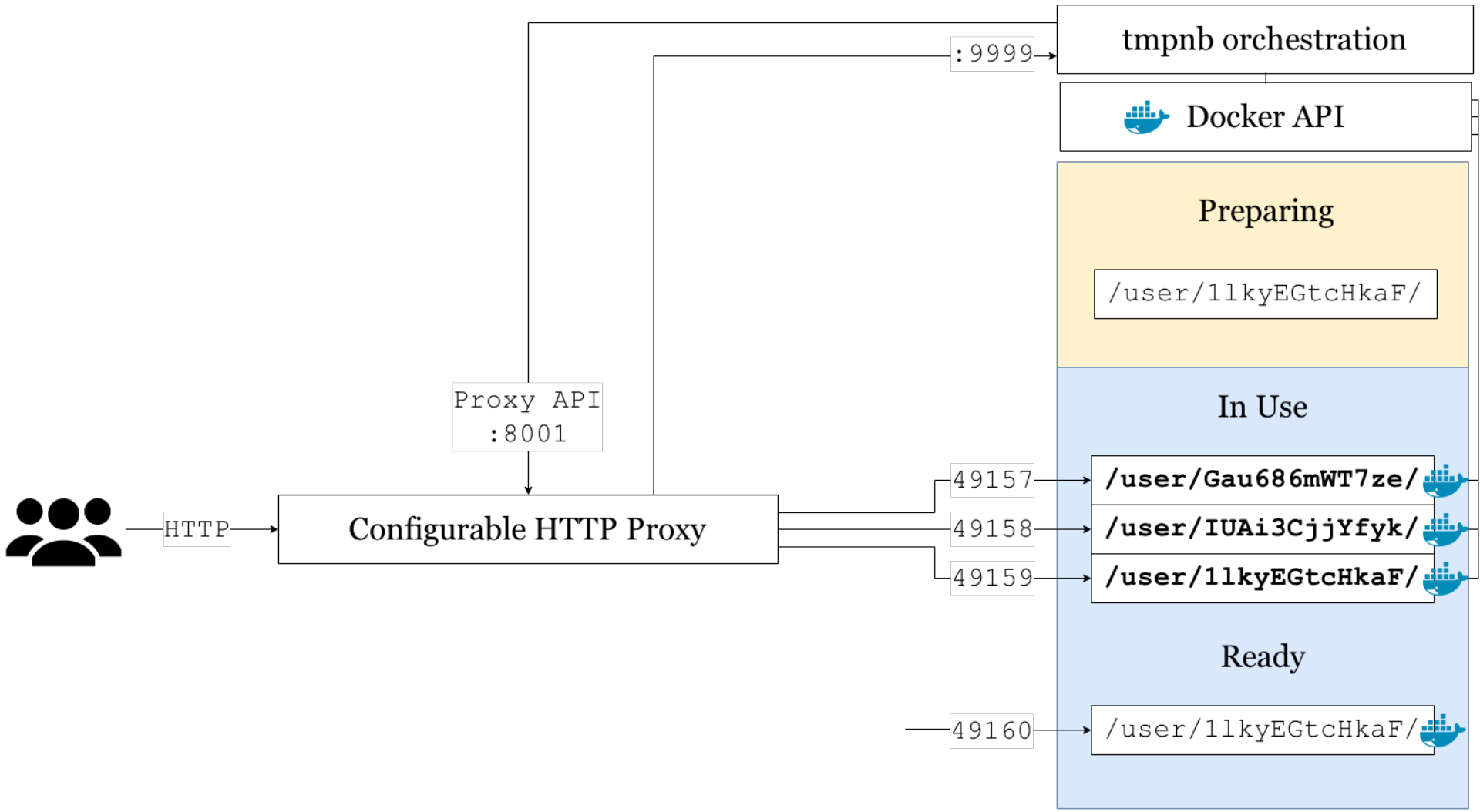
REPL 协议支持
Notebook
JupterHub
… 语言无关的!

Jupyter 已能

Julia

Ruby ...

Jupyter + tmpnb



150507 正式联姻

DropBox, GitLab, Google Drive....

150507 正式联姻

c. [US] https://github.com/OpenBookProjects/ipynb/blob/master/XKCD-style/XKCD-demos.ipynb

XKCD 样图表

为什么!?

因为喜欢哪!

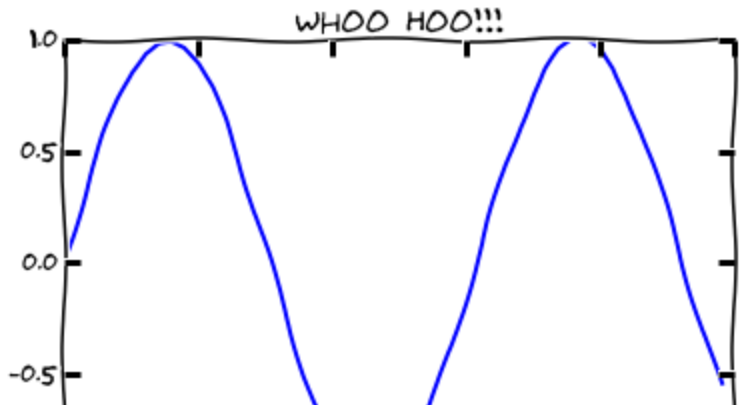
In [56]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

In [67]:
```
%pylab inline
```

```
Populating the interactive namespace from numpy and matplotlib
```

In [68]:
```
plt.xkcd()  # Yes...
plt.plot(sin(linspace(0, 10)))
plt.title('Whoo Hoo!!!')
```

Out[68]:
```
<matplotlib.text.Text at 0x11181cd90>
```



#总之

+ R 和 Py 都是好的
+ IP[y]: 值得折腾
+ Jupyter 必须关注
+ Pandas... 很好玩

IP[y]: + Jupyter

样例

#是也乎

Q&A

zoomquiet+dama@gmail.com

Life's pathetic, go Pythonic !

Happy Hacking