

Software Development & Python

Nick Levashov, 2021



Guido van Rossum

Author of the Python programming language





Guido van Rossum
gvanrossum

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🏢 Microsoft

📍 San Francisco Bay Area

🔗 <https://python.org/~guido/>

🐦 @gvanrossum

Achievements



Organizations



📖 Overview

📁 Repositories 22

📁 Projects

📦 Packages

Popular repositories

patma

Pattern Matching

Public

● Python ☆ 905 🍴 48

500lines

Forked from aosabook/500lines

Public

500 Lines or Less

● Python ☆ 258 🍴 43

cpython

Forked from python/cpython

Public

The Python programming language

● Python ☆ 136 🍴 13

pyxl3

Forked from vikasuy/pyxl

Public

A Python 3 extension for writing structured and reusable inline HTML.

● Python ☆ 135 🍴 13

guidos_time_machine

Guido's time machine

Public

● Python ☆ 85 🍴 9

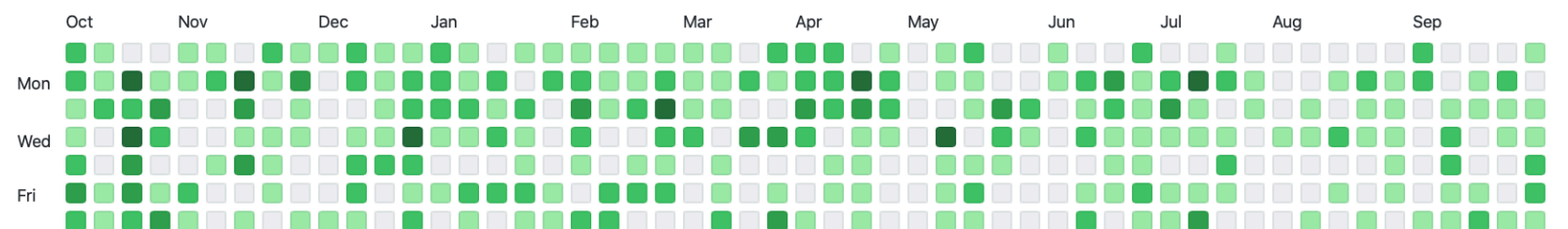
ctok

Expose CPython's tokenizer as a Python class

Public

● C ☆ 63 🍴 9

670 contributions in the last year



Learn how we count contributions

Less More

History

History

- v0.9 - February 1991

History

- v0.9 - February 1991
- v1.0 - January 1994

History

- v0.9 - February 1991
- v1.0 - January 1994
- v2.0 - October 2000

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- v2.0 - October 2000
- v3.0 - December 2008

History

- v0.9 - February 1991
 - v1.0 - January 1994
 - v2.0 - October 2000
 - v3.0 - December 2008
- *Pascal* - 1970
 - *C* - 1972
 - *C++* - 1980
 - *Java* - 1995
 - *JavaScript* - 1995

```
>>> def fib(n):
>>>     a, b = 0, 1
>>>     while a < n:
>>>         print(a, end=' ')
>>>         a, b = b, a+b
>>>     print()
>>>
>>> fib(1000)
```

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Python is

- high level

Python is

- high level general purpose

Python is

- high level general purpose programming language

Python is

- high level general purpose programming language
- interpreted


```
>>> numbers = [2, 4, 6, 8]
>>> product = 1
>>> for number in numbers:
...     product = product * number
...
>>> print( 'The product is:', product)
The product is: 384
```

- CPython
- IronPython
- Jython
- PyPy
- PythonNet
- Stackless Python
- ...

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Python is

- high level general purpose programming language
- interpreted (cpython)
- dynamic typed
- garbage collected

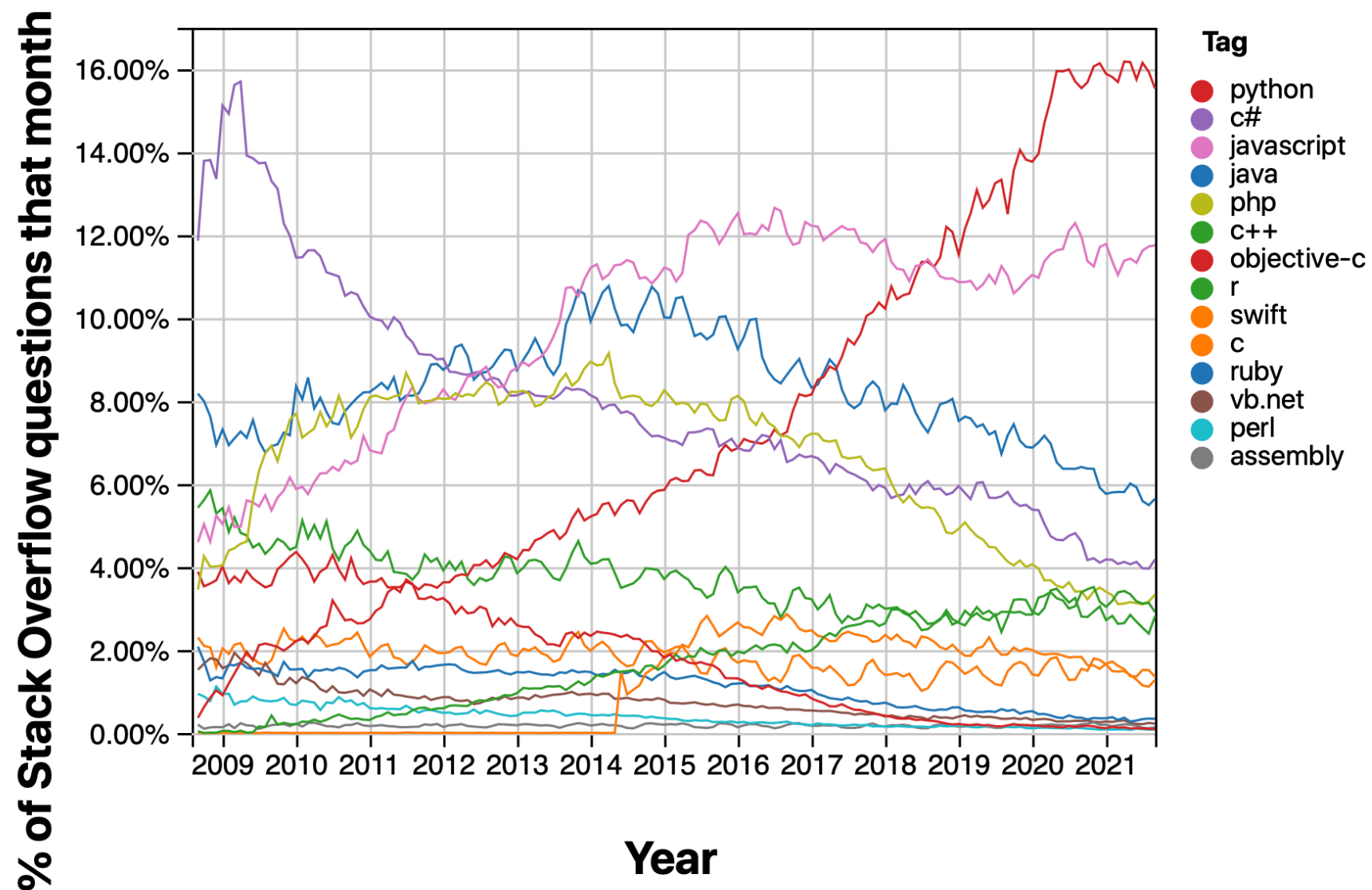
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>>>         a, b = b, a+b
>>>     print()
>>>
>>> fib(1000)
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987
```


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- interpreted (cpython)
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Why Python?

Stack Overflow Insights



Why Python?

TIOBE index

Oct 2021	Oct 2020	Change	Programming Language		Ratings	Change
1	3	▲		Python	11.27%	-0.00%
2	1	▼		C	11.16%	-5.79%
3	2	▼		Java	10.46%	-2.11%
4	4			C++	7.50%	+0.57%
5	5			C#	5.26%	+1.10%
6	6			Visual Basic	5.24%	+1.27%
7	7			JavaScript	2.19%	+0.05%
8	10	▲		SQL	2.17%	+0.61%
9	8	▼		PHP	2.10%	+0.01%

<https://www.tiobe.com/tiobe-index/> , Oct 2021

Why Python?

PYPL index

Worldwide, Oct 2021 compared to a year ago:

Rank	Change	Language	Share	Trend
1		Python	29.66 %	-2.1 %
2		Java	17.18 %	+0.8 %
3		JavaScript	8.81 %	+0.4 %
4		C#	7.3 %	+1.1 %
5	↑	C/C++	6.48 %	+0.7 %
6	↓	PHP	5.92 %	+0.1 %
7		R	4.09 %	+0.2 %
8		Objective-C	2.24 %	-1.2 %
9	↑	TypeScript	1.91 %	+0.1 %
10	↑↑	Kotlin	1.9 %	+0.3 %

<https://pypl.github.io/PYPL.html> , Oct 2021

Python is #1