

The importance of culture in open source

Matthew Brett

Open source culture

- ▶ Absurd ambition
- ▶ Persistence
- ▶ Enthusiasm
- ▶ Courage
- ▶ Friendship

Hacker Heroes



Richard Stallman

- ▶ Give me back my printer
- ▶ [Lisp Machines Inc](#) vs [Symbolics](#).
- ▶ Gnu Public License and copyleft

Hacker Heroes



Linus Torvalds

I decided just, how hard can it be? – Interview with LT

Scientific Python (and R)

python "data scienc..."
Search term

r "data science"
Search term

spss "data science"
Search term

java "data science"
Search term

matlab "data scienc..."
Search term

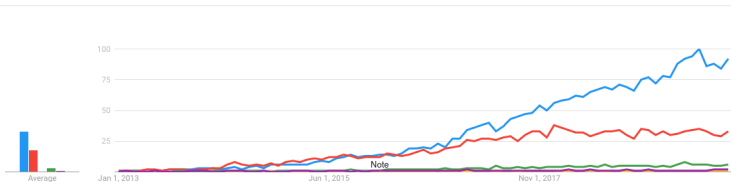
Worldwide ▾

1/1/13 - 1/1/20 ▾

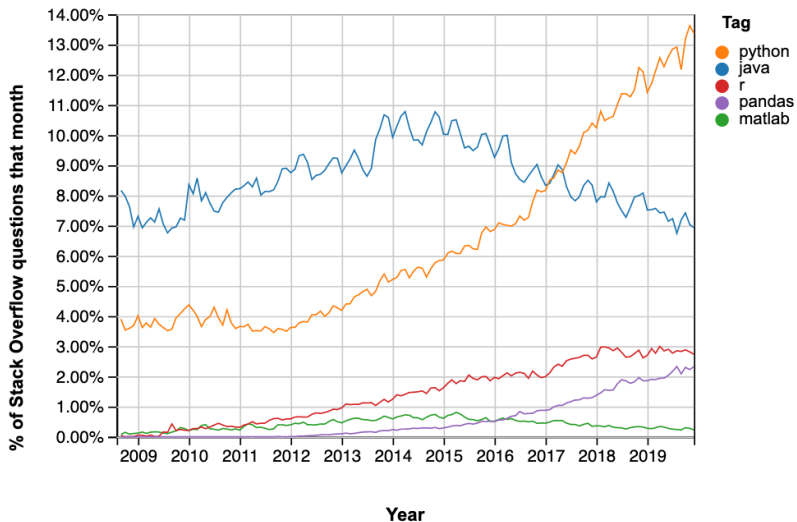
All categories ▾

Web Search ▾

Interest over time ?



Python in science



Genesis of Scientific Python

How do the foundations get built?

As compared to

New function interfaces undergo a rigorous design process that typically involves dozens to hundreds of developer-hours per function.

MATLAB toolboxes offer professionally developed, rigorously tested, field-hardened, and fully documented functionality for scientific and engineering applications.

MathWorks has over 250 full-time quality and test engineers who validate product quality and accuracy, and ensure the software passes extensive test suites before being released.

[Matlab vs

Python]<https://uk.mathworks.com/products/matlab/matlab-vs-python.html>, [Matlab vs](#)

[R](#).

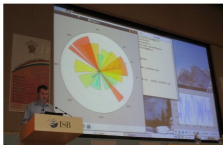
Where?

Where do the foundations get built?

Friendship

We build this stuff by trusting each other as friends, and that is done on an international level. Theo de Raadt [email to OpenBSD mailing list](#)

Jupyter, Matplotlib, Fernando Pérez, John Hunter



In memoriam John Hunter

Passion

I want to assume that we do this from love, that we care about each other, and that we welcome the crackle of real passion, real work, the real interaction of ideas. Ron Jeffries: Passion

On culture

I came to see, in my time at IBM, that culture isn't just one aspect of the game - it is the game (Louis V Gerstner, "Who says elephants can't dance?" p182)

High-performance teams

High-performance teams achieve beyond any measure of reasonableness, and they have fun doing it. The finely developed sense of humor in these groups seems to distinguish them as well. Not everything they do is laced with fun, and there may be some humorless high-performance teams out there. But we doubt it. (“The wisdom of teams” by Jon R. Katzenbach and Douglas K. Smith).

A view from over the hill

Find:

- ▶ Absurd ambition
- ▶ Persistence
- ▶ Enthusiasm
- ▶ Courage
- ▶ Friendship

wherever you can. Then go and work with those people. Move if you have to.

What should we do?

How can we foster these virtues in our University?

The Hacker Within

What next?

Is this the end of the talk?

Yes, it is the end of the talk.