

# Python for Beginners

01 – What And Why

# What is Python?

- Invented by *Guido van Rossum in 1991*  
*“high-level programming language, and its core design philosophy is all about code readability and a syntax which allows programmers to express concepts in a few lines of code.”*
- Named after Monty Python  
→ Programming is fun 😊
- *One of the most popular programming languages today.*
- *Actual Language Versions*
  - *Python 2.7.15 → old language path (not compatible with Python 3!)*
  - *Python 3.7.0 → new language path (modern version)*
- Here is your entry point: <https://www.python.org>



# Why Python?

- Easy to learn for beginners
- Very popular and widely used language
- #1 educational language at U.S. universities
- #1 language for statistics and big data analysis
- #1 language for A.I. and machine learning
- #1 language on embedded systems like raspberry pi
- One of the most popular web programming languages
- Python programming is one of the most in-demand jobs in market

# PYPL Popularity of Programming Language

- The PYPL Popularity of Programming Language Index is created by analyzing how often language tutorials are searched on Google.
- Source:  
<http://pypl.github.io/PYPL.html>

Worldwide, Sept 2018 compared to a year ago:

| Rank | Change | Language    | Share   | Trend  |
|------|--------|-------------|---------|--------|
| 1    | ↑      | Python      | 24.58 % | +5.7 % |
| 2    | ↓      | Java        | 22.14 % | -0.6 % |
| 3    | ↑      | Javascript  | 8.41 %  | +0.0 % |
| 4    | ↓      | PHP         | 7.77 %  | -1.4 % |
| 5    |        | C#          | 7.74 %  | -0.4 % |
| 6    |        | C/C++       | 6.22 %  | -0.8 % |
| 7    |        | R           | 4.04 %  | -0.2 % |
| 8    |        | Objective-C | 3.33 %  | -0.9 % |
| 9    |        | Swift       | 2.65 %  | -0.9 % |
| 10   |        | Matlab      | 2.1 %   | -0.3 % |

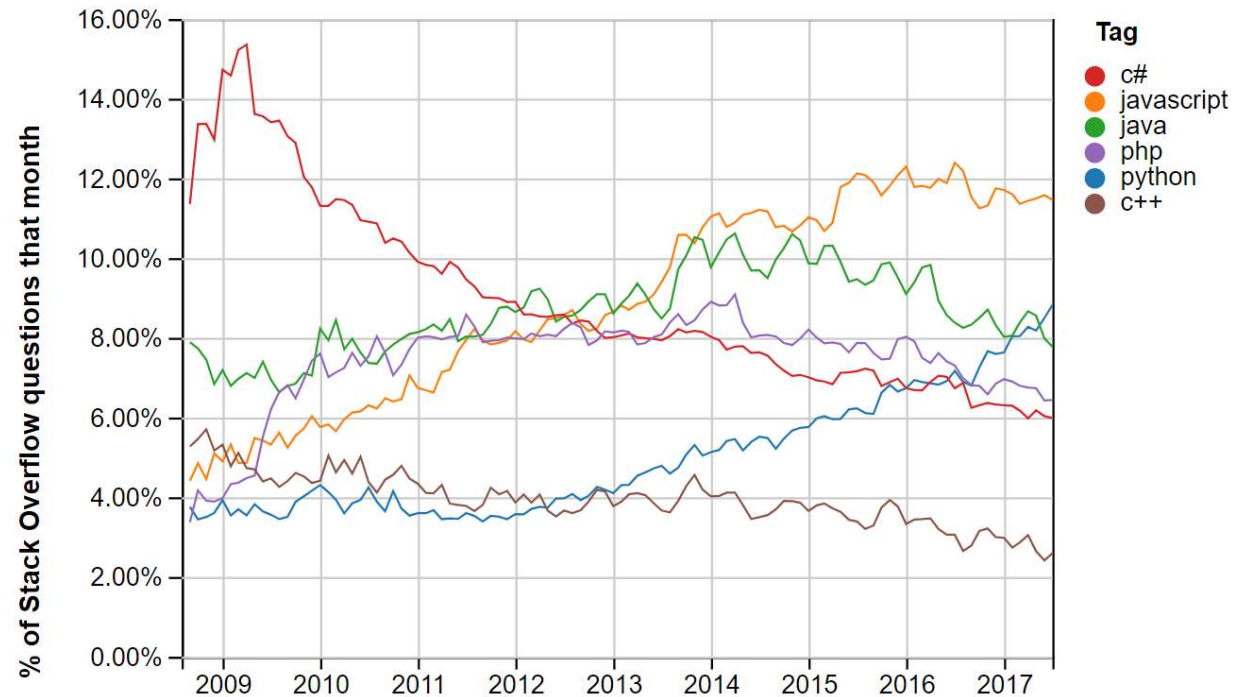
# Github Pull Requests Statistic

| # Ranking | Programming Language | Percentage (Change) | Trend |
|-----------|----------------------|---------------------|-------|
| 1         | JavaScript           | 22.309% (-2.534%)   |       |
| 2         | Python               | 16.256% (+0.720%)   |       |
| 3         | Java                 | 9.874% (-0.597%)    |       |
| 4         | Go                   | 7.609% (+1.586%)    | ^     |
| 5         | C++                  | 7.074% (+1.280%)    | ^     |
| 6         | Ruby                 | 6.533% (-0.127%)    | v     |
| 7         | PHP                  | 5.790% (-0.994%)    | v     |
| 8         | TypeScript           | 4.766% (+1.410%)    | ^     |
| 9         | C#                   | 3.336% (-0.554%)    | v     |
| 10        | C                    | 2.938% (-0.073%)    |       |

- Source: [https://madnight.github.io/githut/#/pull\\_requests/2018/2](https://madnight.github.io/githut/#/pull_requests/2018/2)

# Stack Overflow Traffic

- Traffic of searching and discussing at Stack Overflow



- Source: <https://insights.stackoverflow.com/trends>