























LANGUAGES

GENERAL














EMBEDDED













UPDATED

Language Rank	Types	Spectrum Ranking
1. C		100.0
2. Java		98.1
3. Python		97.9
4. C++		95.8
5. R		87.7
6. C#		86.4
7. PHP		82.4
8. JavaScript		81.9
9. Ruby		73.8
10. Go		70.9
11. Arduino		69.3
12. Matlab		68.7
13. Assembly		68.0
14. Swift		67.6
15. Scala		66.3
16. HTML		66.0
17. Perl		58.4
18. Visual Basic		56.6
19. Objective-C		53.4
20. Shell		53.0
21. Cuda		52.3
22. Lua		51.3

GENERAL SURVEY ~ 2016-2017

Language Ranking: IEEE Spectrum

Rank	Language	Type	Score
1	Python	  	100.0
2	Java	  	95.3
3	C	  	94.6
4	C++	  	87.0
5	JavaScript		79.5

7	Arduino				73.2
8	Go				73.1
9	Swift				70.5
10	Matlab				68.4
11	Ruby				66.8
12	Dart				65.6
13	SQL				64.6
14	PHP				63.8

1. Python Programming Language

[Python](#) is an **interpreted**, high-level, general-purpose programming language created by **Guido van Rossum** with an emphasis on code readability and a soft spot for white-space.

It has, since its inception, established itself as an ideal language for both general-purpose and task-specific tasks ranging from developing games to analyzing large data sets.

2. Java

Java is a class-based, object-oriented programming language designed by **James Gosling** as an improvement of the **C++** programming language. It provides its users with enterprise-worthy stability, the ability to write once and run anywhere thanks to its **Virtual Machine** which enables one to port it across different **IoT** platforms.

Java is fast, excellent at handling exceptions, runs smoothly even on old generation software, and emphasizes several beneficial coding practicing such as **encapsulation**, and above all, it is easy to learn with a rich library of functions and documentation.

C Programming Language

C is a statically typed high-level programming language created by **Dennis Ritchie** with the aim of providing a language relatively easier to write code in compared to **Assembly** which was the more widely used language at the time.

The **C programming language** is blazing fast and even allows developers to design custom compilers quickly. It has built-in pointers which provide access to low-level system components, a large ecosystem that's welcoming to developers, a loose data typing policy, etc. – all features which have made it pretty much the default language for embedded systems.

C++ Programming Language

C++ was created as an extension of **C** and it is just as fast and powerful coupled with modern improvements that make it more desirable to veteran developers. Its namespace feature prevents naming conflicts, boasts the ability to overload constructors and functions, works with templates, etc.

C++ has many features that are typically lacking in **C** e.g. developers can use inline functions instead of macro definitions. It is also more beginner friendly than its predecessor.

by [Martins D. Okoi](#)

The C/C++ programming languages dominate embedded systems programming, though they have a number of disadvantages. [Python](#), on the other hand, has many strengths that make it a great language for embedded systems. Let's look at the pros and cons of each, and why you should consider Python for embedded programming.

C/C++ are compiled languages, while Python is an interpreted language. C/C++ have been around for ages; C was first developed in 1969, and C++ came along in 1983. Python is younger as it was created in 1989 by Guido van Rossum. Since then, it's become one of the most popular open source programming languages. All Python releases are open source and freely usable and distributable, even for commercial projects. (If you're looking for commercial-grade support and indemnification, distributions like ActivePython are available.)

<https://www.activestate.com/blog/python-vs-cc-embedded-systems>

10 Best Programming Languages for Embedded Systems

April 23, 2019

by [Martins D. Okoi](#)

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<https://www.fossmint.com/programming-languages-for-embedded-systems/>

CHECK OUT THE REST AT OKOI'S Site
- Languages are described in detail.