

IEEE Python Course

Date: 9 June 2020

What is python ?



Python is

High level

Interpreted

Object oriented

Dynamically typed

language

High Level:

More like a natural(human) language.

Sometimes, actual code looks like a pseudo code!

Interpreted:

Python has an interpreter not a compiler.

Interpreter reads the program line by line where compiler translates the whole program first before running.

Object oriented:

It gives structure to the program. Enhances readability of code.

Dynamically typed:

It is not about typing the code! Interpreter checks the data types on the go.

Makes it developer friendly.

Motivation





- Python, the fastest-growing major programming language, has risen in the ranks of programming languages in our survey yet again, edging out Java this year and standing as the second most loved language (behind Rust).

Pros:

- Easy to learn
- One of the best programmer community
- Great for prototypes
- Libraries for everything

Cons:

- It's bit slower than C++ & JAVA
- Not native to mobile

Types of Python Development Environment



You can use it for...

django

**Web
Development**

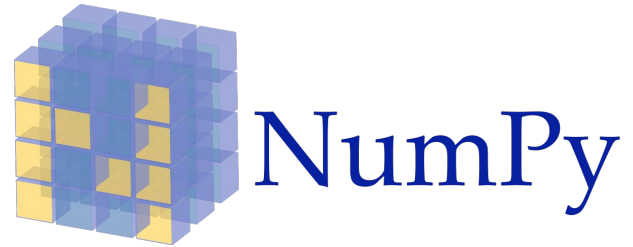


Flask

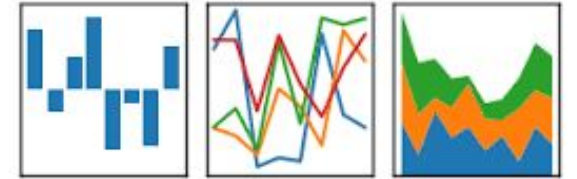


Pylons™

Data Science and Visualization



pandas
 $y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$



matplotlib



Machine learning





Desktop applications





Mobile applications



PEP 8

- PEP Stands for **Python Enhancement Proposal**.
- Python maintains a strict way of order and format of scripting. This sometimes mandatory and is a great help on the user's end, to understand.



EAT

SLEEP

CODE

REPEAT