JatinSir - Mastering Python

Best Python Training with Real-time Project

Duration of the Training: 42-48 hours

Who can learn Python?

In short anyone.

- Automation Engineers
- Data analysts and scientist
- Quality Analysts
- System Administrator
- Web Developers
- Networking Professionals
- Software Developers
- Hadoop programmers
- Desktop Applications
- Robotics Engineers
- Hardware level developers

General Questions:

Can I learn Python as I'm not from programming background?

In short yes; the technique I use in the class is focus on every field of engineers. I have trainer more than 200 professional from network background and more than 100 college's fresher's which were never exposed to programming.

What if I take more time in understanding the concepts?

My Online videos and promise to attend any numbers of batches within the six months of time frame, helps everyone.

How this course is useful for me?

Course is divided into 10 different modules, covers Basic and Advance Python, Python with Software Automation and Python for Data Analytics.

First 6 modules covers the basic and advance, aka foundation level of Python which is helpful for Quality Analysts, System Administrator, Web Developers , Networking Professionals, Software Developers, Hadoop programmers, Desktop Applications, Robotics Engineers, Hardware level developers

Syllabus:

Module-1: Python Overview

- Why Python and where to use it?
- What is Python and history of Python?
- Discussion about Python 2 and Python 3
- Set up Python environment for development
- Discuss about IDE's like IDLE, Pycharm and Enthought Canopy
- Unique features of Python
- Discussion about unique feature of Python
- Write first Python Program
- Start programming on interactive shell.
- Using Variables, Keywords,
- Taking Built-in Functions help,
- Strings, Different Literals,
- Math Operators and Expressions,
- Writing to the Screen, String Formatting, Command Line Parameters
- Python Identifiers, Keywords and Indentation
- Comments and document interlude in Python

Module 2 – Core Objects and Built-in Functions

- Discussion about installed module s and packages
- Various python built in functions and Getting User Input
- What are variables?
- Python Data Types

- Python Core objects and Functions
- Number, String, List, Dictionaries, Tuple, set, generator, file etc
- Built in modules (Library Functions)
- Number and Math's, datetime and zip modules

Module 3 - Sequences and File handling

- Condition statements in Python
- Loops and statement in Python
- Python Decorators and Generator
- Python Modules & Packages
- Python Files and Directories manipulations
- Read, write and append files using file objects
- Use various files and directory functions for OS operations

Module 4 – Data Structures, data processing and User Defined Functions

- Access Number/String/List/Dictionaries/Tuple
- Complex Data structures in Python
- Arbitrary data types and their Data Structure
- Python built in function
- Python user defined functions
- Python packages functions
- Defining and calling Function
- The anonymous Functions - Lambda Functions

Module-5 – Object Oriented Python and Exceptional Handling

- Object oriented features
- Understand real world examples on OOP
- Implement Object oriented with Python
- Creating Classes and Objects, Destroying Objects
- Accessing attributes, Built-In Class Attributes
- Inheritance and Polymorphism
- Overriding Methods, Data Hiding
- Overloading Operators
- Python Exceptions Handling

- What is Exception?
- Handling various exceptions using try….except…else
- Try-finally clause
- Argument of an Exception and create self exception class
- Python Standard Exceptions
- Raising an exceptions, User-Defined Exceptions

Module-6– Debugging, Database handling and Project Skelton

- Debug Python programs using pdb debugger
- Pycharm Debugger
- Assert statement for debugging
- Testing with Python using UnitTest Framework
- Project Skelton and using Nose framework.
- Creating a Database with SQLite 3,
- CRUD Operations,
- Creating a Database Object.
- Python MySQL Database Access
- DML and DDL Operations with Databases
- Performing Transactions
- Handling Database Errors
- Disconnecting Database

Module 7 – Regular Expression, Package Installation, Windows spreadsheet parsing and webpage scrapping

- What are regular expressions?
- The match and search Function
- Compile and matching
- Matching vs searching
- Search and Replace feature using RE
- Extended Regular Expressions
- Wildcard characters and work with them
- What is pip, easy_install and Pycharm?
- Set up the environment to install packages?
- Install packages for XLS interface and XLS parsing with Python
- Create XLS reports with Python

- Introduction to web scraping and beautiful soup

Module 8 – Machine Learning with Python

- Introduction to Machine Learning,
- Areas of Implementation of Machine Learning,
- Why Python
- Major Classes of Learning Algorithms
- Supervised vs Unsupervised Learning, Learning
- Why Numpy?
- Learning Numpy and Scipy,
- Basic plotting using Matplotlib
- Algorithms using Skikit learn

Module 9 – Data Analysis with Pandas

Introduction to Python Pandas

- Creating Data Frames,
- Grouping, Sorting
- Plotting Data
- Data analysis with data set
- Practical use case using data analyze
- Introduction to Hadoop

Module 10 – Hadoop dataprocessing with Python

- Understanding MapReduce Framework,
- Sample MapReduce Job Run
- PIG and HIVE Basics,
- Streaming Feature in Hadoop,
- Map Reduce Job Run using Python,
- Writing a PIG UDF in Python,
- Writing a HIVE UDF in Python,
- Pydoop and MRjob Basics

(Assignment and Live Examples)

Real time examples with live project for Google finance data extractions and report creation will be done by students with my guidance.

Sample resumes helping you to create your resume

Additional Benefits:

- We provide real time scenarios examples, how to work in real time projects
- We guide for resume preparation by giving sample resume
- Will give you 2 POC (proof Of Concept) with Data set so that you can practice before going for interview
- In 2 months training we provide study material's soft copy in classroom itself
- We provide hands –on in class room itself so that you can understand concepts 100%
- We give assignments every week for practice

For whom Python is?

IT folks who want to excel or change their profile in a most demanding language which is in demand by almost all clients in all domains because of below mentioned reasons-

- Python is open source (Cost saving)
- Python has relatively few keywords, simple structure, and a clearly defined syntax. This allows the student to pick up the language in a relatively short period of time.
- Python comes with a large collection of prebuilt and portable functionality known as the standard library. Python has more than 20 Thousand modules. Every new development comes very early in Python like Hadoop interface, Raspberry Pi and many more!
- Python can run on a wide variety of hardware platforms and has the same interface on all platforms.
- You can add low-level modules to the Python interpreter. These modules enable programmers to add to or customize their tools to be more efficient.
- Django framework might be the most famous Python web framework, there is also a host of successful small and micro-frameworks.

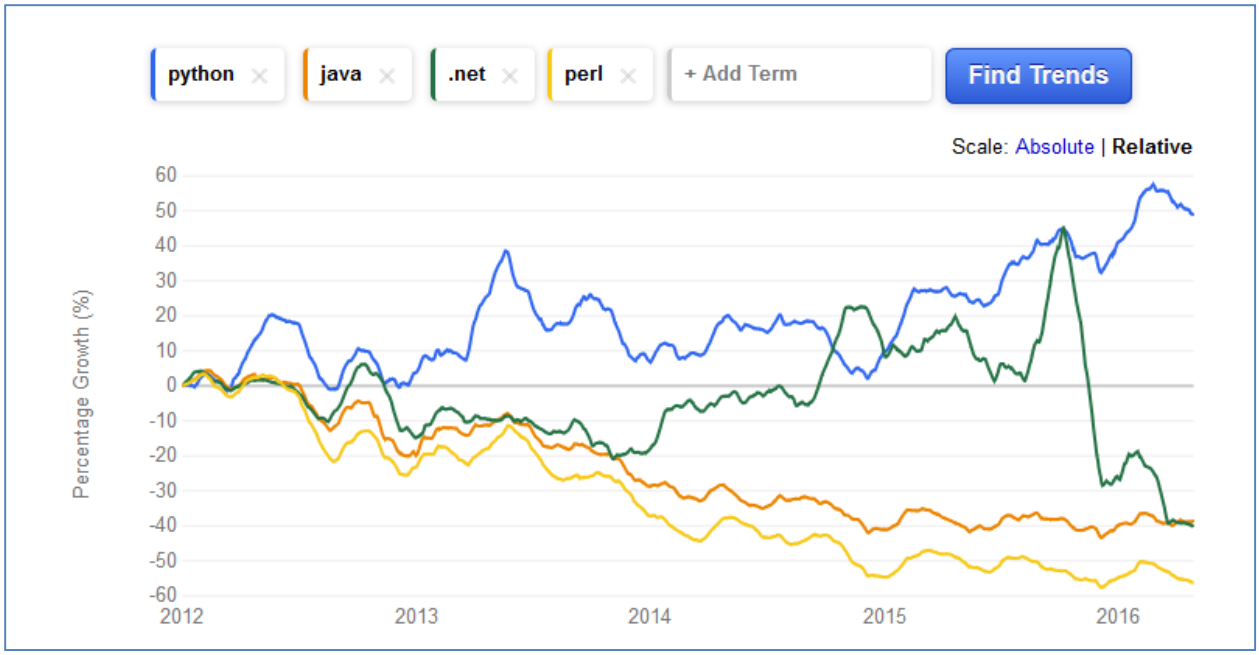
Who use Python?

- Google makes extensive use of Python in its web search system, and employs Python's creator Guido van Rossum.
- The YouTube video sharing service is largely written in Python.
- Disney uses Python in many of their creative processes.
- Mozilla uses Python to explore their extensive code base and releases tons of open source packages built in python.
- Dropbox file hosting service is implemented using Python, Guido van Rossum now working here.
- The popular Bit Torrent peer-to-peer file sharing system is a Python program.
- Intel, Cisco, Hewlett-Packard, Seagate, Qualcomm, and IBM use Python for hardware testing.
- JPMorgan Chase, UBS, Getco, and Citadel apply Python for financial market forecasting.
- NASA, Los Alamos, JPL, use Python for scientific programming tasks.
- iRobot uses Python to develop commercial robotic vacuum cleaners.
- The NSA uses Python for cryptography and intelligence analysis.
- And Many More.

Anyone can learn Python, whether they are from Networking, Administration, manual testing or may be from IT support. It is a big myth that if guys don't know C or C++ then he can't learn Python.

What is the job trend in Python?

Per the indeed.com, percentage growth of Python is 700 times more than its peer Languages.



http://www.indeed.com/jobtrends/q-python-q-java-q-.net-q-perl.html?relative=1

As per the Forbes Python have most jobs in Big Data space

http://www.forbes.com/sites/louiscolumbus/2014/12/29/where-big-data-jobs-will-be-in-2015/

Python is part of the winning formula for productivity, software quality, and maintainability at many companies around the world.

Few of them are specified at: https://www.python.org/about/success/