



# Course Introduction: Python, AI/ML, Azure

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Day	Schedules of Training	Remark	2
1. Python (coding)  Day 1 9:00 - 16:00 [ 24 March 2023 ]	<b>Python fundamentals</b> <ul style="list-style-type: none"><li>Basic Python Programming (Syntax, Data Types, Condition, Loop, Function, etc.)</li><li>Advanced Python Programming (Class, Numpy, Regex, etc.)</li><li>Demo Showcases</li></ul> <b>Python for data manipulation</b> <ul style="list-style-type: none"><li>Managing Table with Pandas</li><li>Data Visualization</li><li>Demo Helpful Use cases</li></ul>	Limit seat for 10 persons	
2. AI/ML  Day 2 9:00 - 16:00 [ 30 March 2023 ]	<b>Python for Machine learning (Scikit-Learn)</b> <ul style="list-style-type: none"><li>Introduction to Machine Learning</li><li>Supervised Learning</li><li>Unsupervised Learning</li><li>Deep Learning (Demo)</li></ul>	Limit seat for 10 persons	
3. Azure (cloud)  Day 3 9:00 - 16:00 [ 31 March 2023 ]	<b>Introduction to Azure ML</b> <ul style="list-style-type: none"><li>Kick-start with Azure ML</li><li>Azure ML via GUI</li><li>Auto-model in Azure ML</li><li>Running python on Azure ML</li></ul> <b>Data Pipeline</b> <ul style="list-style-type: none"><li>Azure SQL Server</li><li>Azure SQL Database</li><li>Azure Data Factory</li><li>Azure Data Lake</li></ul>		
Day	Schedules of Online Mentor Session		
4. Real hands-on (mentoring)			
Day 1 13:00 - 16:00 [ 3 April 2023 ]	Online Mentor Session  (3 groups: 1 hour/week/group)		
Day 2 13:00 - 16:00 [ 7 April 2023 ]	Online Mentor Session  (3 groups: 1 hour/week/group)		



# Outlines

- Why Python?
- Python packages
- Top 10 programming languages for Data Science
- Top 10 Python libraries for Data Science
- ML tools
- Recommended resources



# Top 10 Reasons to Learn PYTHON



Python For Data Science



## Top 10 Reasons You Must Learn Python in 2023

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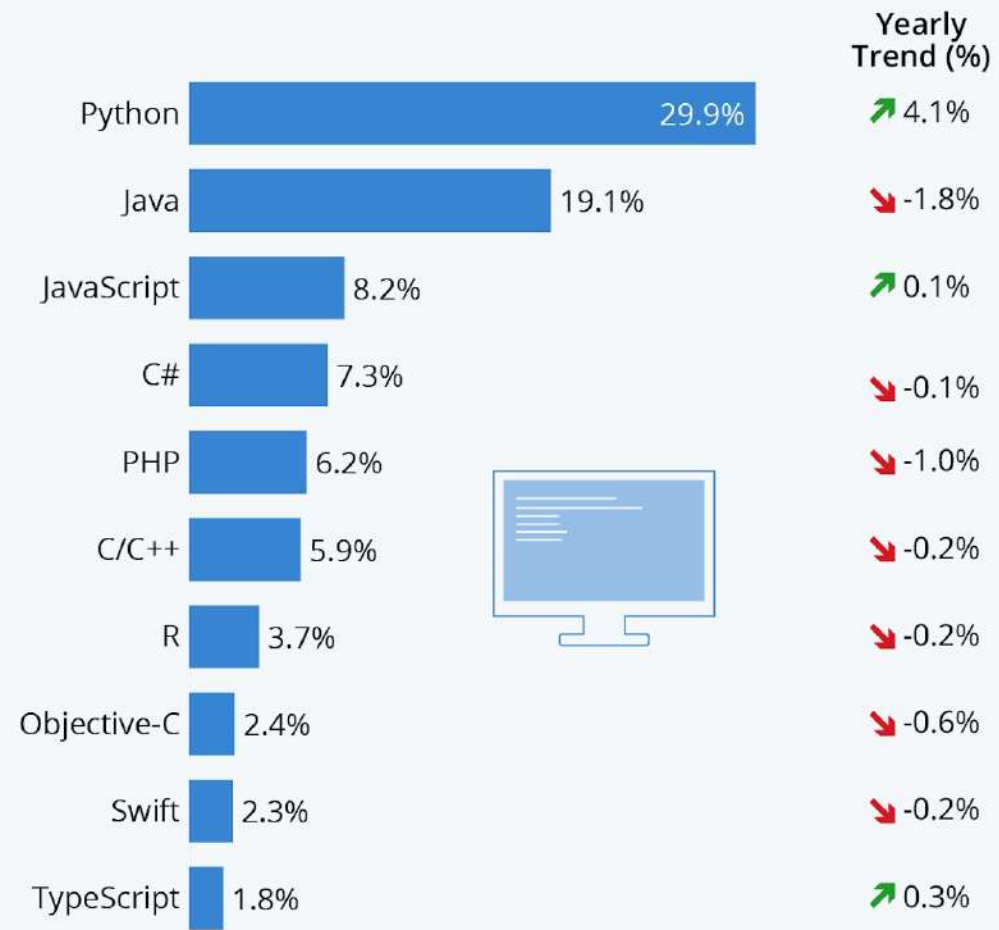
**Rashmi Karan** • Manager Content • 382 Blogs written

1. [Python Is Beginner-Friendly](#)
2. [Massive Libraries to facilitate data science and ML tasks](#)
3. [Worldwide popularity and usage](#)
4. [Adoption by Top Companies](#)
5. [Excellent Career Opportunities](#)
6. [Python is Good for Web Development](#)
7. [Easy GUI Development Using Python GUI Frameworks](#)
8. [Python is excellent for testing](#)
9. [Strong Community Support](#)
10. [Incredible Versatility](#)

<https://www.shiksha.com/online-courses/articles/reasons-to-learn-python/>

# Python Remains Most Popular Programming Language

Popularity of each programming language based on share of tutorial searches in Google



Yearly trend compares percent change from Feb 2019 to Feb 2020  
Sources: GitHub, Google Trends





# Why Python is so popular? Python packages

5


2018	142,599 projects	1,001,945 releases	1,347,356 files	282,165 users
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Mar-2023	441,202 projects	4,295,079 releases	7,834,309 files	683,087 users
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The Python Package Index (PyPI) is a repository of software for the Python programming language.

PyPI helps you find and install software developed and shared by the Python community. [Learn about installing packages](#) .

Package authors use PyPI to distribute their software. [Learn how to package your Python code for PyPI](#) .

# Top Programming Languages for Data Science



Updated on 17th Mar, 23 692 Views

## Top Programming Languages for Data Science

In today's ever-growing competitive technology market, numerous data is being generated each day. Presently, 5 billion consumers are interacting with data daily. According to IDC, this is expected to reach 6 billion by 2025, i.e., nearly 76 percent of the population is going to conduct data operations every day. Hence, prior knowledge on Data Science Programming Languages help to deal with data quickly and efficiently.

- Python
- R
- Scala
- Julia
- Java

- SQL
- MATLAB
- JavaScript
- SAS
- C++





Developers

5 MINUTES READ

SHARE



# Top 10 Python Libraries for Data Science in 2023

POSTED ON March 17, 2023

POSTED BY Muhammad Ahmad

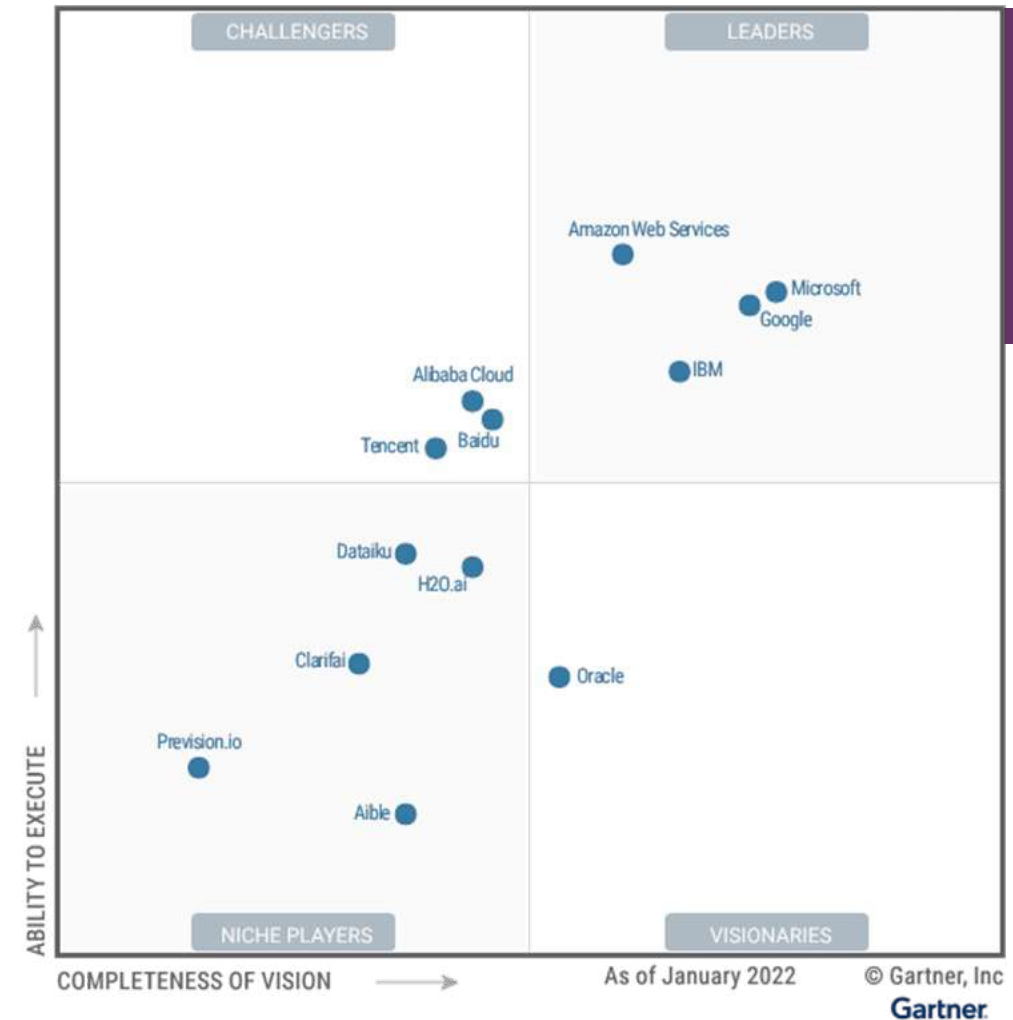


# + ML tools

Figure 1: Magic Quadrant for Data Science and Machine Learning Platforms



Source: Gartner (March 2021)



<https://cloud.google.com/resources/2022-gartner-magic-quadrant-cloud-ai-developer-services-report>

<https://techcommunity.microsoft.com/t5/azure-partner-community/microsoft-is-a-leader-in-2022-gartner-magic-quadrant-for-cloud/td-p/3599976>



# + Recommended resources

9

- กิตติภณ พลະการ, กิตติภพ พลະการ, สมชาย ประสิทธิ์จตุระกุล และ สุกรี สิ้นธุภัญญ์, หนังสือสอนเขียนโปรแกรมภาษา Python ใช้ประกอบการเรียนวิชา 2110101 Computer Programming, ภาควิชาวิศวกรรมคอมพิวเตอร์ จุฬาลงกรณ์มหาวิทยาลัย  
<https://www.cp.eng.chula.ac.th/~somchai/>
- Python for Data Science and Machine Learning Bootcamp <https://www.udemy.com/python-for-data-science-and-machine-learning-bootcamp/>



## Course Review: Python for Data Science and Machine Learning Bootcamp



รศ. ดร. สมชาย ประสิทธิ์จตุระกุล



*Any Questions?*