The Atlanta University Center(AUC) Consortium, Data Science Initiative, Beginner Python Academy

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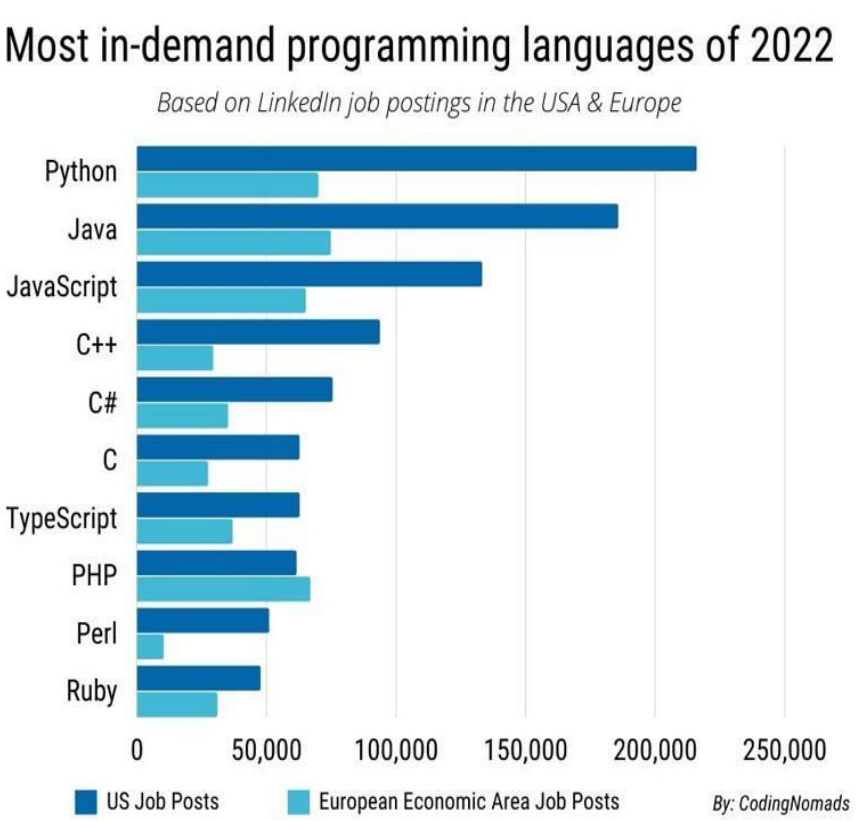
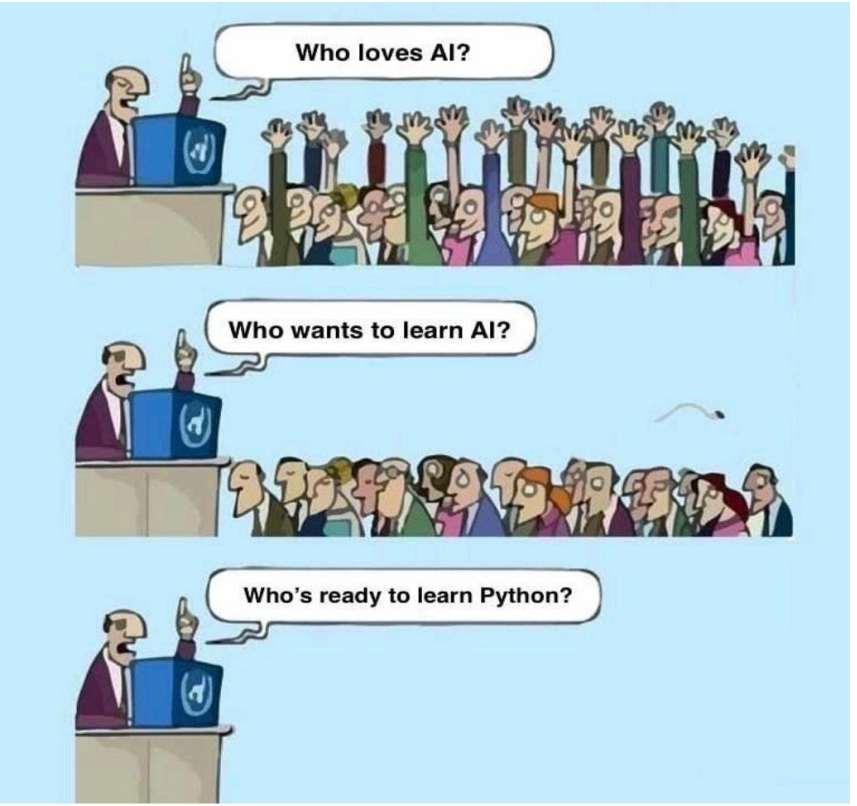
(May 19-20, 23-24, ThFMT:, 9:00 am-4:00 pm ET)


Most in-demand programming languages of 2022
Based on LinkedIn job postings in the USA & Europe
Python
Java
JavaScript
C++
C#
C
TypeScript
PHP
Perl
Ruby
0
50,000
100,000
150,000
200,000
250,000
US Job Posts
European Economic Area Job Posts
By: CodingNomads


Who loves AI?
Who wants to learn AI?
Who's ready to learn Python?

Workshop Outline

1. Python Basics

2. Essential Python Modules for Data Science
   a. Numpy: arrays
   b. Matplotlib: visualization
   c. Pandas: data analysis
   d. Fun Projects!

3. Introduction to Machine Learning with Python(probably no time for this (:)

General Overview

- Assuming no prior knowledge.
- Data science oriented context.
- Don’t get stuck in tutorial purgatory…
- 50 mins lecture + 10 mins break
- Three small size capstone projects

Day-1: Python Basics

1) How to Python
   a) Use Python shell/editor
   b) Run from a file
   c) **Use Jupyter notebook**
2) Fundamental Data Structures
3) Control Flows, Functions
4) Interacting with Python modules

Day-2

- **Numpy**: Numerical Python
- **Matplotlib**: Data Visualization

Day-3

- **Pandas:** data analysis library
- **Seaborn:** advanced visualization library built on top of matplotlib.

Day-4: Pandas Projects and More

1. **Pandas Projects**
    a. Smoking is bad for you!
    b. What can we learn from our own Netflix Data?
    c. Which people had a better survival chance in Titanic?
2. **Assignment Discussion**
3. **Closing Remarks**
    a. **Use Python Locally**
    b. **Set-up your GIT profile**