Workshop **Python for Economics**

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Why Programming?

Economics Saeed Saffari

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Why Programming?

Why Programming

Economics?

Programming Langua

Why Pyth

Comparing Bython developmen

Popularity of Pytho

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How to Start?

Thank you

- Looking for Common language between Human and Machine
- ▶ Different Works, Different Languages
- ▶ Why Python?
 - Close to Human Language
 - Easily Connect to other Languages
 - General usage
 - Wide range of fields
 - Great Communication

Why Programming in Economics?

Python for Economics

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Python development Popularity of Python

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How to Start?

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Analysis of Economic Data

- High volume of generated data
- Impossibility of data management in software such as Excel
- Read data from an online database
- Quantitative Methods
 - Influence of different mechanisms on an economic
 - The complexity of economic issues facing economists
 - Lack of analytical solutions to problems

Programming Languages













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How to Start?

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Comparing the way Python works with common programming languages

- ► C/C++ and Fortran:
 - Time-consuming coding
- ► MATLAB:
 - Lack of proper economic packages
 - Lake of design, efficiency compared to Python
 - Not open source
- R
- Useful in statistics with high variety of packages
- ► Stata
- ▶ Julia

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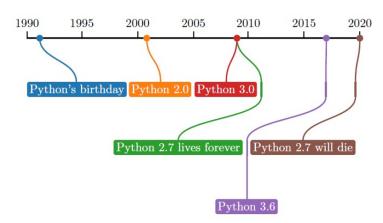
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Overview of the Python development by versions and dates:



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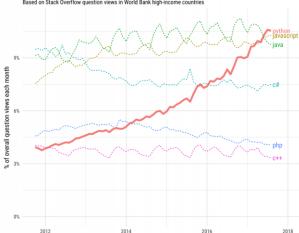
How to Start?

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Python has become extremely popular



Based on Stack Overflow question views in World Bank high-income countries



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Popularity of Python

Time

Trade-Offs

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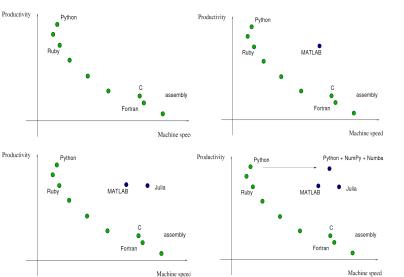
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- Python Setup
- Object and Data Structure Basics
- ► Python Statements
- Methods and Functions
- Modules, Packages
- ► Libraries
 - NumPy
 - Matplotlib
 - Pandas
 - SymPy and SciPy

How to Start?

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How to Start

How to Start?

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► Read, Read! Write, Write!

- ▶ GitHub and Stack Overflow
- Editors
- ► Anaconda
- ► Search Skill

Thank you

• ANY QUESTION...?

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