Python Everywhere

Vihar Kurama

Programming

Questions

- What is a programming language?
- Why are there so many programming languages?
- What are the types of programming languages?
- Does the world need new programming Language?

"A Programming Language is a set of rules that provides a way of telling a computer what operations to perform"





























































Python Programming Language





Why Python?

- Easy to use, powerful, versatile.
- Dynamically Interpreted Language.
- Python is great for backend web development, data analysis, artificial intelligence, and scientific computing.
- Open Source.

How is it useful to you?

- Web Technologies
- Computer Networks
- Compiler Construction
- DBMS Connections
- Data Science
- Machine Learning

Basics of Python

- Python Shell
- Python Script
- Numbers and Variables
- Strings and Formatting
- Lists, Tuples, Dictionaries
- Conditionals

- Control Flow
- Object Orientation
- Errors and Exceptions
- Modules
- Packages

Python for WEB





"Python Web Frameworks"

What exactly is a framework?

"A web framework is a code library that makes a developer's life easier when building reliable, scalable and maintainable web applications."

How to choose between frameworks?

Pros and Cons



Django The web framework for perfectionists with deadlines.



How everything works?

- Models
- Views
- URLs/Routes
- Templates
- Database
- Hosting

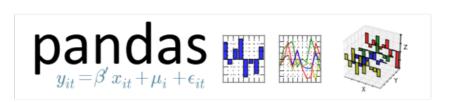
Python for Data Science







IP [y]: IPython
Interactive Computing





Data Science

- Finding patterns in data, the up's and down's.
- Cleaning
- Processing
- Analysis
- Statistics
- Visualisation

Python for Al



PYTÖRCH





"Artificial Intelligence is the New Electricity"

-Andrew Ng

The Intuition

ARTIFICIAL INTELLIGENCE

A program that can sense, reason, act, and adapt

MACHINE LEARNING

Algorithms whose performance improve as they are exposed to more data over time

DEEP Learning

Subset of machine learning in which multilayered neural networks learn from vast amounts of data

Questions?

Let's get started with the real part!