

Workshops

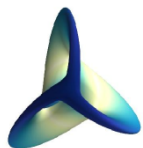
We propose to organise basic Python workshops using spoken tutorials. We strongly believe & recommend this learning process as it yields better results than a usual workshop that demands more time.

Salient features of Workshops

- Free of cost.
- Recipe-based approach for beginners.
- Variety of real world examples & exercises.
- High quality material taught by experts in the domain.
- One can start using Python for curricular needs like plotting, symbolic & numeric calculations, right away.

Scipy (International Conference on Python for Education & Scientific Computing)

Scipy.in is a conference providing opportunity to spread the use of the Python programming language in the Scientific Computing community in India. This conference has been successfully organized since last 3 years.



Weblinks

Website:
<http://fossee.in>

Spoken Tutorials:
<http://spoken-tutorial.org>

Downloads:
<http://fossee.in/Downloads>

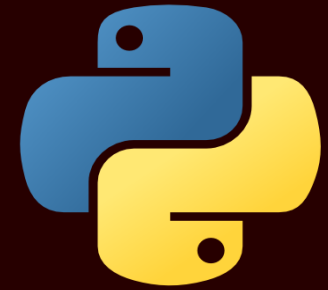
Mailing list for discussion and help:
<http://fossee.in/mailman/listinfo/python-help>

Contact us

General help, Queries & Workshop requests:
Email - info@fossee.in



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python

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<http://fossee.in>

*Free and Open source Software in
Science & Engineering Education.*

About FOSSEE

The goal of this project is to enable the teachers and students of Science & Engineering in India to use open source software tools for all their computational needs, thereby improving the quality of instruction and learning. We are focusing on Python in the area of Scientific Computation.

We are at

The project is based at the **Indian Institute of Technology, Bombay (IIT-B)**.

Funded by

The project is funded by **MHRD** as a part of the National Mission on Education through **Information and Communication Technology (NMEICT)**.

We do

- Solve curricular exercises using **FOSS** tools.
- Organize sprints, generate relevant material.
- Design courses to teach the use of **FOSS** tools.
- Conduct workshops to spread the adoption of these tools.
- Conduct conferences to popularize these tools across the country.
- Create content for these courses - written material, spoken tutorials and lectures.

We've done so far

- Conducted 35 workshops across India.
- Developed Text Book Companion project, to be active by *Jan'12*.
- Assisted several institutes in training faculty for usage of **Python**.
- Conducted first SDES trial course at IIT Bombay and BMS college, Bangalore.
- Held the International Conference on Scientific Python - **SciPy 2009/10/11**.
- Conducted a 10-day workshop (5 weekends) on Python, Linux CLI and Latex tools for 750 teachers across the country.



What is Python ?

Python is a general purpose highlevel programming language whose design philosophy emphasizes code readability.

Why Python ?

- Easy to learn.
- Portable and cross-platform.
- Full-fledged programming language.
- Excellent scientific computing libraries.
- Supports both Procedural and Object Oriented programming.
- SAGE, NumPy, SciPy, Matplotlib and Cython make Python an open source alternative to MATLAB, Mathematica, Magma and Maple.

Applications of Python

- User interfaces.
- 2D/3D Graphics.
- Web development.
- Exploration and Visualization.
- Numeric and Symbolic computation.
- High performance Parallel Computing.

- Game development & various other domains.

Projects of Python

Spoken Tutorials

A Spoken Tutorial refers to explaining any computer-based activity with the screen-cast and a narration. The screen-casting software captures all the activities on the screen along with the narration to play it back as a video clip. This is called a Spoken Tutorial.

The Spoken Tutorial can be used to explain the steps involved in carrying out any screen-based activity, such as using the features of some software.

SDES Course

(Software Development techniques for Engineers & Scientists)

Engineering students use computers for a large number of curricular tasks – mostly computation centered. This course is intended to train those students in good software practices and tools for producing code and documentation.

Textbook Companion Project

The Textbook Companion Project aims to port worked out examples and select exercise problems from standard text books using Open Source Software tools, such as Python. Any standard text book can be used for this purpose.

The objectives of the project are:

- To develop programming logics for the problems given in the text books.
- Create a repository with solutions to the problems, for future reference.