

The Spoken Tutorial project

- *Self explanatory - uses simple language
- *Audio-video - uses multisensory approach
- *Small duration - has better retention
- *Learner-centered - learn at your own pace
- *Learning by doing - learn and practice simultaneously
- *Empowerment - learn a new FOSS

Target Group

- *Students - High School and College
- *Working professional - Software users, developers and trainers
- *Research scholars
- *Community at large

Workshops

The Spoken Tutorial Projects Team conducts workshops on Scilab and other FOSS using Spoken tutorials and gives certificates to those who pass an online test.

For more details, please write to contact@spoken-tutorial.org

Scilab is a major component of the FOSSEE (Free and Open Source Software for Science and Engineering Education) project, funded by the National Mission on Education through Information and Communication Technology, launched by the Ministry of Human Resource Development, Government of India

For Announcements:
<http://scilab.in/cgi-bin/mailman/listinfo/announce>

For Discussions:
<http://scilabin/cgi-bin/mailman/listinfo/discuss>

For more information contact us at:
contact@scilab.in



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Scilab

Scilab is a cross-platform, free (free of cost and free to distribute and modify) and open source numerical computational package.

<http://scilab.in>
<http://scilab.org>
<http://fossee.in>

National Mission on Education through Information and Communication Technology (NMEICT)
www.sakshat.ac.in

Funded by MHRD, Government of India

<http://spoken-tutorial.org>

Scilab is a cross-platform, free and open source numerical computational package and an easy-to-use, interpreted, high-level, matrix based programming language with a versatile inbuilt mathematical library.

It can be used for

- Graphing and data visualization
- Control
- Signal and Image processing
- Statistical analysis
- Fluid dynamics
- Linear algebra
- Numerical optimization
- Modeling and simulation of dynamical systems

Its capabilities can be extended through the use of readily available or custom made toolboxes where the extensions can be written in ubiquitous lower level languages like Fortran and C.

Xcos Xcos is a graphical dynamical system

modeler and simulator. With this, the user can create block diagrams to model and simulate the dynamics of sophisticated dynamical systems and compile such models into executable code. Xcos is used for signal processing, systems control, queuing systems, and to study physical and biological systems. It can be used to model and simulate mechanical systems, hydraulic systems, electrical systems, chemical systems, biological systems and many more.

Lab Migration Project

Is your lab still paying hefty amounts for mathematical tools which can be replaced by a nifty, free-of-cost software called Scilab? Then we suggest its the time to switch to the world of free knowledge and also to grace your annual balance-sheets significantly.

Please get in touch with us at

contact@scilab.in and we will help you.

Please allow us to assist your lab in shifting to Scilab.

http://scilab.in/lab_migration/proposal

For more information please visit

http://scilab.in/Lab_Migration_Project

The Textbook Companion Project

The Textbook Companion Project aims to port worked out examples (and optionally, select exercise problems) from standard textbooks using an open source software system, such as Scilab. In the following writeup, the word Scilab can be replaced by any other open source software as well. Any "standard" text-book can be used for this purpose. It will be referred to simply as textbook.

What is the objective of this exercise?

* To make it easy for the users of the textbook to start using Scilab

* To improve the documentation available for Scilab
For more details please visit

http://scilab.in/Textbook_Companion_Project

Hardware Project

SBHS: Single Board Heater System (SBHS) is a lab-in-a box setup which is primarily used for teaching/studying the theory of control systems. The setup has been designed to cater the needs of undergraduate and postgraduate control courses. You can perform various control experiments on it - from tests as simple as Step Tests to complicated closed loop tests! This setup is also available for remote access under Virtual labs project

<http://vlabs.iitb.ac.in/sbhs/index.php>

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

Data Acquisition System: Project aims to setup virtual labs based on standard DAQ cards available. (eg PCI 1711 Advantech DAQ card). Open source drivers ,tools and libraries are available from COMEDI (linux control and measurement device interface). HART toolbox provides interface between comedi and scilab to access ADC and DAC functionality of DAQ card.

<http://comedi.org/>

<http://hart.sourceforge.net/doc.html>

Workshops

We propose to organise Level-o Scilab workshops using spoken tutorials of ten minutes each. We believe that the extent of learning possible in the above mentioned scheme would be better than a usual workshop of much longer time duration. Possibly, the scheme proposed here could be considered as equivalent to a one week typical workshop. Hence it may be possible to give a certificate to this effect. For more details please visit: <http://scilab.in/wiki/index.php/Workshops> GNU Radio GNURadio is an open source Software Defined Radio (SDR) that was designed to convert all hardware problems into software problems. GNURadio package is provided with a complete HDTV transmitter and re-ceiver, a spectrum analyzer, an oscillo-scope, a multichannel receiver and a wide collection of modulators and demodulators. Its applications are primarily written using the Python programming language, while the supplied, performance-critical signal processing path is implemented in C++ using processor floating point extensions where available. For more details please visit <http://spoken-tutorial.org/script/index.php/GNURadio> The Links Project Links Project provides a mechanism to list all the available scilab documents and to rank them. This project allows community participation for both listing and ranking. For more information, please visit <http://scilab.in/links>