

**Abstract:** The speaker will present a summary of three successful projects carried out from IIT Bombay in the general area of ICT training.

Spoken Tutorial is a method to provide ICT training through 10 minute long videos created through screencast. These tutorials are created for self learning; spoken part dubbed into 22 Indian languages; can be used offline, which makes it accessible to students who don't have access to Internet. Using this method, 40 lakh students have been trained in the past four years, in about 5,000 colleges, affiliated to about 100 universities, through 36,000 lab courses. It has received several awards, including Google MOOCs Focused Research Award. URL for this work: <http://spoken-tutorial.org>.

FOSSEE stands for Free and Open Source Software for Education. While Spoken Tutorial looks at training the bottom of the pyramid, FOSSEE looks at training at a higher level, and also content generation through crowdsourcing. This project works in niche software tools in various engineering domains, some examples being Scilab, Python, eSim (electronic circuit simulation), DWSIM (chemical process flowsheeting), OpenFOAM (computational fluid dynamics), OpenModelica (general purpose modelling), and Osdag (steel structure design). Through Textbook Companions, students from across the country have generated one of the largest source of solved examples using Scilab and Python. URL for this work: <https://fossee.in>.

The Talk will also introduce an affordable laptop that the speaker has been promoting. At Rs. 10,000, it is an excellent laptop for most engineering students. A demo of this laptop will be given during the talk. More details of the laptop can be seen at this link: <https://www.linkedin.com/pulse/affordable-laptop-kannan-moudgalya/>.