OETC 2014 Conference

Python Programming in Your Classroom

Session Type: BYOD / BYOT Session (W4E170)

Tracks: Educational InnovationsHigher Education Research

Wednesday - January 29, 2014 - 1:00PM – 2:45PM (1hr & 45mins) -- Room: E170

Primary Presenter

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Professor of Computer Science

Description

A brief introduction for Teachers in their Classrooms of the setup, installation and running of the Python Computer Program Language. The Python Language has a quickly learned fairly simple syntax, but a vast set of libraries that can take a student from their first computer programming experience into College Level and to eventually their future job and careers. A simple start-up program will be demonstrated in conjunction with participants using their own device they have brought to the session. Also, demonstrated will be vivid graphical language features supporting math and science courses. And, even some discussion of concerns for potential Python Language abuse in the Classroom.One other computer programming language skill would be helpful, but not mandatory.

Methodology

Session attendees are encouraged to BYOT, however, this is not a requirement to attend this session. Attendees will be able to install and run their first Python computer program during this session. Python is FREE and available for install on most platforms from the WEB.

Session BYOD Pre-Work

Module 1 (Basics)

Get your free copy of Python 3.3+ (scroll down to "DOWNLOAD" on the following web page):

Windows:

http://www.python.org/getit/releases/3.3.0/

Linux:

http://www.python.org/getit/releases/3.3.0/

Mac OS:

http://www.python.org/getit/releases/3.3.0/

{remember to pay attention to details 64 bit or 32 bit, generally, for a recent Windows machine it will be 64 bit. Be sure an select the right download for your hardware/software combination}

Install it by following the directions for your specific platform.

Module 2 (Graphics)

Pillow for Windows (PIL)

https://pypi.python.org/pypi/Pillow/2.2.1#downloads

http://pyqtgraph.org/

Windows binaries:

http://qt-project.org/wiki/PySide_Binaries_Windows

Module 3 (Scraping)

You will also need to download and install **BeautifulSoup** & **lxml**

for WEB Page scraping capabilities as follows:

http://www.crummy.com/software/BeautifulSoup/#Download

http://lxml.de/installation.html

Optional Installs for Windows

cgwin xxxxxx

emulator xxxx

Python On Adroid (limited)

Where to get it—how to install:

http://www.ehow.com/info_12179898_python-android.html

All Session References

See MITCourseware: http://ocw.mit.edu/index.htm

Prof. Eric Grimson, Prof. John Guttag

MIT Course Number 6.00 As Taught In the Fall of 2008