Request for Proposal: Scipy 2017 Teen Track

SciPy 2017, the sixteenth annual Scientific Computing with Python conference, will be held this July 10th-16th in Austin, Texas, at the AT&T Executive Education and Conference Center on the University of Texas campus. SciPy is a community dedicated to the advancement of scientific computing through open source Python software for mathematics, science, and engineering. The annual SciPy Conference allows participants from all types of organizations to showcase their latest projects, learn from skilled users and developers, and collaborate on code development.

The Tutorial Committee is seeking an instructor for a new "Teen Track" tutorial, aimed at high-school students who have some experience with programming (if statements, for loops and the like) and an interest in science. We expect these students will be attending SciPy with parents or will be from local area high schools.

The tutorial should consist of a basic introduction to scientific computing with Python and some components of the Scipy Stack (NumPy, SciPy, Matplotlib, IPython/Jupyter, Pandas, SymPy, and nose.) We expect there to be a wide variety of programming experience among the attendees, so aiming for near the least experienced might be best. The tutorial will last one full day. The morning session begins at 9 am, and ends at noon, and generally has one break at 10 am. The afternoon session begins at 1:30 pm, ends at 5:30, and generally has one break at 3 pm. The instructor can measure the mood of the students and call for extra breaks as needed.

The second day will consist of a morning visit to the Texas Advanced Computing Center (TACC) on the University of Texas campus (within walking distance). We expect that visualizations will be a large focus of the demonstrations at TACC, so a focus on visualizations during the tutorial might be helpful. The afternoon session on the second day will consist of talks from four or five speakers from various fields who can speak to the students about how they used Python to solve problems in their respective areas of expertise. These speakers will be selected by the Tutorial Committee.

The instructor will receive a \$2000 stipend, and, given the audience of the tutorial, will be required to undergo a basic background check.

We would ask any potential instructor to supply:

A detailed abstract of the tutorial

- A short bio, including relevant teaching experience, especially any with students in this age range. Links to any recorded talks or tutorials that are available online would be welcomed.
- Detailed instructions on setup instructions for all necessary software
- A list of skills required to participate in the tutorial NumPy, SciPy, Pandas, command line tools, etc.
- Any other areas of knowledge that might be a prerequisite algebra, trigonometry, basic science, etc.
- A short Python program that can be used to verify that the students have the necessary dependencies installed and working.

The deadline for proposal submission is March 6, 5 PM, CST. Proposals should be emailed to: <u>SciPy@enthought.com</u>. Any questions about the process can also be submitted to that address.