

XSEDE16 Modeling Day

XSEDE16 will showcase the discoveries, innovations, challenges and achievements of those who use and support XSEDE's advanced computing, data, and visualization resources and services, as well as other digital resources and services throughout the world. The XSEDE16 theme is: DIVERSITY, BIG DATA, & SCIENCE AT SCALE.



Modeling day is open to all students attending XSEDE16. Teams of undergraduate and graduate students will select a modeling project that involves developing Python code and running simulations that provide insights into a science problem. Each project contains a set of background materials, a starting code, and objectives to be met. Prior to Modeling Day, a Python tutorial will be offered to better prepare students. Modeling Day facilitators will advise and guide students to ensure their success. The experience has proven to be empowering, and many of the students increase their engagement in computational science activities and training as a result.

There are two sponsorship opportunities for Modeling Day: travel support for Florida students, and participation awards.

Travel Support for Florida Students:

XSEDE has partnered with the Sunshine State Education Computing Alliance (SSERCA) to offer the first- ever distributed modeling challenge, as an extension of the traditional Modeling Day held during the conference. Leading up to the XSEDE16 conference, SSERCA members are hosting local modeling challenges across the state in nine regions. One team of five to six undergraduate and graduate students from each region will be selected to travel to Miami to

participate in the XSEDE16 Conference student activities, including the Student Program Modeling Day.

SSERCA was established in 2010 as an extension of a New Florida Initiative grant which supported selected multi-institutional research projects. SSERCA has grown into an ongoing collaboration between Florida's major research universities that seek to make their resources available to enhance research, education, and economic growth throughout the state. The list of SSERCA member institutions is available at <https://sserca.fau.edu/members/>.

Approximately 48 students (eight teams of six students) will require travel support. (Students from Miami will also be provided lodging so they can be immersed in the XSEDE16 conference experience.) Other teams will require transportation and lodging. All students will receive a per diem for meals not provided by the conference. Transportation, lodging and per diem are estimated at \$750 per student for 48 students, for a total budget of \$36,000.

Participation Awards:

All students who participate in Modeling Day will receive certificates recognizing their participation and an Amazon or similar vendor gift card valued at \$50. One hundred students are expected to participate in Modeling Day, for a total budget of \$5,000.