Summer Institute on Cyberinfrastructure for Socio-Environmental Synthesis 2020

Deadline:
Mar 30, 2020

The National Socio-Environmental Synthesis Center (SESYNC) invites applications to a short course on data and coding skills for socio-environmental synthesis. The 7th annual Summer Institute will be held Tuesday, July 21, 2020 (optionally July 20) through Friday, July 24, 2020, at SESYNC in Annapolis, Maryland. The short course will combine lectures, hands-on computer labs, and project consultation designed to accelerate the adoption of cyber resources for all phases of data-driven research and dissemination.

Over the four-day course (optionally five-day, see below), participants from several research teams will receive instruction on scripting complete data pipelines and implementing distributed workflows within the R + RStudio development environment. Individual lessons will focus on widely applicable data skills (such as data wrangling, relational databases, GIS, and visualization), and break-out sessions will introduce other useful languages (such as Python, SQL, and JavaScript). Open Science and Reproducible Research principles are an overarching theme of SESYNC training initiatives, so the tools we present will be accessible to all researchers at their home institutes. Teams of 2-4 participants will apply to bring work in progress for project-specific consultations with SESYNC computing and scientific staff. Our staff can provide advice on a wide range of workflow and methodological challenges to advance specific project objectives.

Through this short course, participants should expect to:

- Learn new scientific computing skills
- Overcome project hurdles
- Gain coding confidence
- Have fun.

Programming Basics (Optional)

Participants with no scientific computing experience are required to arrive on Monday, July 20 for beginner lessons introducing the R programming language. Teams are not expected to attend this optional day as a group, but instead to send members who may have less (or no!) experience with computer programming.

Eligibility

Members of SESYNC science teams (i.e., participants in a Pursuit or Workshop funded by SESYNC) will be given priority. Remaining space will be awarded to teams of 2-4 researchers who are actively collaborating on problems at the intersection of humans and the environment that involve quantitative and/or qualitative data. Participants may be at any career stage, from graduate student to senior researcher/faculty, and from academic, government, or non-profit sectors.

Each participant must be able to bring a laptop on which they can install open source software, and teams must bring data from a current research project they have worked on together.
Support

SESYNC will cover eligible travel expenses, including flights and accommodations, for successful applicants. Please see our travel policies for complete information [1].

Application Process

The course is designed for small teams and only one person from each team should begin the application process. Each proposed member will be instructed to confirm their interest, summarize their experience with scientific computing, indicate a preference for attending the optional “day zero” for a very basic introduction to scripting in R using RStudio, and upload a CV. Click here [2] to apply.

Questions?

Email Rachael Blake at rblake@sesync.org [3].

The University of Maryland is an Equal Opportunity Employer
Minorities and Women Are Encouraged to Apply

Source URL:
https://www.sesync.org/opportunities/short-courses/summer-institute-on-cyberinfrastructure-for-socio-environmental

Links
[1]
https://www.sesync.org/system/tdf/resources/travel_policies_january_2020_1.pdf?file=1&type=node&id=3410&force=
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