Support for Campus-based Digital Resource Creation through the Science Gateways Community Institute

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sciencegateways.org

Award Number
ACI-1547611
Science Gateways Community Institute
What is a gateway?
What is a gateway?

- an online community space for science and engineering research and education
- a Web-based resource for accessing data, software, computing services, and equipment specific to the needs of an academic discipline
- A way to help researchers, educators, students, and the public gain access to sophisticated or limited resources
QUBES: Quantitative Biology Education Resources

The Power of Math × Biology × Community

QUBES is a community of math and biology educators who share resources and methods for preparing students to tackle real, complex, biological problems.
The Distant Reader

http://dh.crc.nd.edu/tmp/reader/

...the student/researcher can do their own analysis.
CIPRES: Cyberinfrastructure for Phylogenetic Research

Armand Bilge, 10th grader at Lexington High School, next to a poster explaining his award-winning research project, a map and timeline that identified when HIV arrived in the Americas.

- 1.36 million jobs on TeraGrid/XSEDE submitted by 33,195 unique users.
- Used for curriculum delivery by at least 93 instructors.
- Supported 4,500+ publications.

https://www.phylo.org/portal2
CERA: Coastal Emergency Risks Assessment

https://cera.coastalrisk.live/
Social Media Macroscope

The Social Media Macroscope is a project by University of Illinois Technology Services and the National Center for Supercomputing Applications (NCSA) with the goal of making social media data, analytics, and visualization tools accessible to researchers and students of all levels of expertise. More information about this project can be found at: https://doi.org/10.6084/m9.figshare.6855269.v2

https://socialmediamacroscope.org
Citizen Science: Zooniverse and CitSci

https://www.zooniverse.org/

https://www.citsci.org/

WHAT'S THIS?

Discover, teach, do science.

The Zooniverse enables everyone to contribute to real discoveries. The Zooniverse creates opportunities for people to contribute to real discoveries.

DO SCIENCE, ANYWHERE

Helping you do great science

Create projects, build datasheets, collect data, and view results in real-time.

Want to learn more about citizen science from others in the field?

Click this banner to check out the Rocky Mountain Citizen Science Conference

https://www.citsci.org/
Diverse Qualities

Users
- Researchers
- Educators
- Students
- Policy makers
- Citizen scientists

Functions
- Data collection from sensors or instruments
- Community resource sharing
- Analysis or computation
- Data sharing
- Platforms

Development Stage
- Nascent idea
- Startup
- Operational
- Mature
Services and Resources

Support for Building & Running Gateways

Education & Training

Opportunities for Networking & Community
Support for Building & Running Gateways

Gateway Catalog with Projects and Software Components

Consulting Services

Hosting Services
Education & Training: Face-to-Face

Conference & Tutorials

Bootcamp

Student Programs
Online Resources

Materials for all interests and levels of experience

Tech Blog: Benefits of Application Programming Interfaces (APIs)
By Jesse Bahadurian Corndell

Tech Blog: Using Keycloak to Provide Authentication, Authorization, and Identity Management Services for Your Gateway
By Marcus Chatzian

Education & Training: Online Webinars
Opportunities for Networking & Community

Annual Conference

Community Forum & Resources
56 gateways supported with direct consulting services

1453 participants in 42 educational and training programs & events

$38.8M in grants awarded with a Letter of Commitment from SGCI (41% success rate)

378 gateways and 71 software components listed in our Catalog
Ways that SGCI might be helpful for you

• **Consulting** expertise & direct support
  • Support and networking opportunities for building *campus-based development capacity*

• **Gateway Catalog** can help you find (or promote) projects hosted on your campus ([https://catalog.sciencegateways.org](https://catalog.sciencegateways.org))

• **Education & training**: Bootcamp, conference, webinars, online content

• **Community resources**: Forum, job postings (post your own), news & events
Connect with us at sciencegateways.org

• Katherine Lawrence  kathla@umich.edu
• Sign up for our newsletter:  https://sciencegateways.org/community/newsletter
• Email a question:  help@sciencegateways.org
• Social media
  • Follow @sciencegateways on Twitter
  • http://sciencegateways.org/linkedin