

NAIRR Pilot

National Artificial Intelligence
Research Resource Pilot

NAIRR Classroom Allocations and Resource Providers Overview

August 5
NAIRR Pilot Allocations

Oyebade Oyerinde
2026 NSF NAIRR AI Education Fellow
Professor at Clark Atlanta University
SGX3 Returnee/Mentee

NAIRR Pilot — Who is it for?

You!

(and your campus colleagues)

No cost to you!

- Instructors from U.S.
2- or 4-year academic institutions
or non-profit organizations
 - *and private sector if they have a federal research grant*
- Any — or no — source of funding
for the research
- Any application domain of AI
 - *in line with NAIRR and NSF priorities*

NAIRR Pilot Open Data, Models & More

As part of the NAIRR Pilot, agency partners have made a wide range of courses, datasets, documentation, models, software, and other resources available — no proposal necessary.

Courses

DOE ALCF AI training program

Documentation

DoD Responsible AI (RAI) Toolkit

NASA Science Ethical AI Resources

... and more

Datasets

NASA Earth Science AI training datasets

NIH Medical Imaging and Data Resource Center (MIDRC)

NOAA Open Data Dissemination

USDA Census of Agriculture

USGS GeoNat Shapes

USPTO Research Datasets

...and more

Models

NASA Harmonized Landsat Sentinel-2 (HLS) Foundation Model

NIH All of Us Researcher Workbench

...and more

NAIRR Classroom: JetStream2 GPU Interfaces

As part of the NAIRR Classroom, the JetStream2 GPU RP provides the following interfaces for deploying educational initiatives: <https://docs.jetstream-cloud.org/tutorial/classroom/overview/>

GPU Resources (Flavors)

A100, H100, L40S NVIDIA GPUs

Jetstream2 GPU

Jetstream2 GPU instances include a partial or full NVIDIA GPU, with up to 80 GB of GPU RAM.

Partial GPU

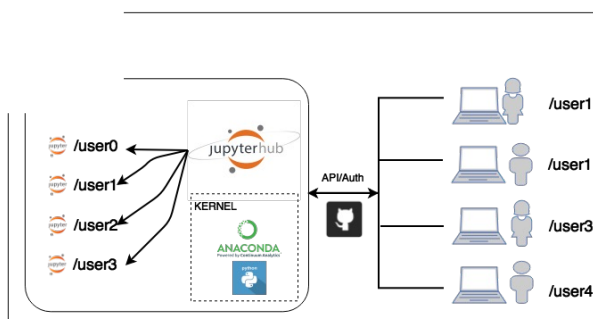
Partial GPU instances offer access to a portion of an A100 GPU by utilizing NVIDIA's vGPU technology and come with a proprietary vGPU driver preinstalled.

Flavor	vCPUs	RAM(GB)	Local Storage (GB)	GPU Compute	GPU RAM (GB)	Cost per hour (SU)
g3.medium	8	30	60	25% of GPU	10	16
g3.large ¹	16	60	60	50% of GPU	20	32

SUs Calculator: <https://docs.jetstream-cloud.org/alloc/estimator/>

<https://docs.jetstream-cloud.org/general/vmsizes/#jetstream2-gpu>

JupyterHub

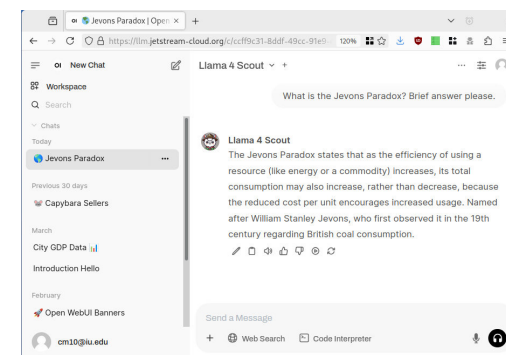


Modified from:

<https://geohackweek.github.io/Introductory/05-Jupyter-tutorial/>

<https://docs.jetstream-cloud.org/tutorial/classroom/overview/#jupyterhub>

LLM/Inferencing-service



<https://docs.jetstream-cloud.org/inference-service/overview/>

NAIRR Classroom: CloudBank Interfaces

As part of the NAIRR Classroom, the CloudBank Classroom RP provides the following interfaces for deploying educational initiatives

GPU Resources

Limited/pilot GPU resource access

JupyterHub

- Lightweight, cloud-hosted JupyterHub
- Programming languages Python, R, and C++
- JupyterLab/Notebook, RStudio and VSCode

Others

- Persistent storage
- Login via University credentials

<https://www.cloudbank.org/training/access-cloudbank-classroom>



Types of Projects

NAIRR Pilot Classroom Allocations

- Open to US-based educators teaching undergraduate or graduate courses or shorter-duration training sessions at US-based institutions.
- Course should align with the educational and workforce development focus of the NAIRR Pilot
 - *Courses must have an AI element*
- Resource use should align with the *Classroom* resources available
 - *Consider scale and scope of each student's expected resource use*
 - *Consider hardware available via the different resources*
- Proposals are considered against posted review criteria and expectations
- **Biggest stumbling blocks?**
 - *Failing to scope per-student resource need*
 - *Failing to align activities with resources (and GPU types) available to classrooms*

NAIRR Pilot Classroom Project Highlights

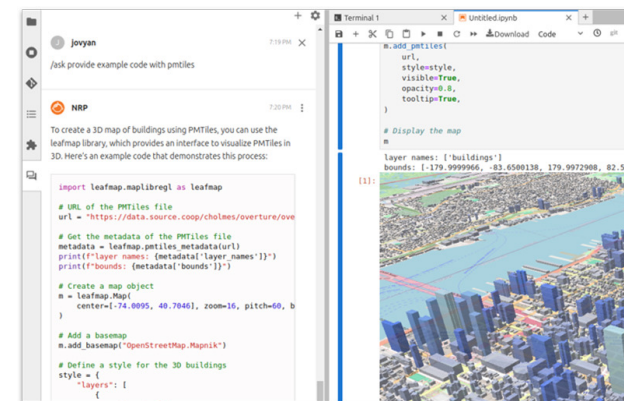
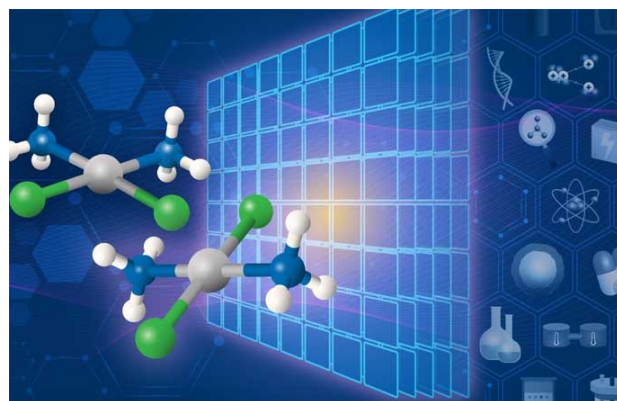
Awards supporting:

- Business Analytics
- Geographic Sciences
- Library and Information Sciences
- Chemical Informatics
- Supply-chain Optimization
- And More!



Course/Training Types:

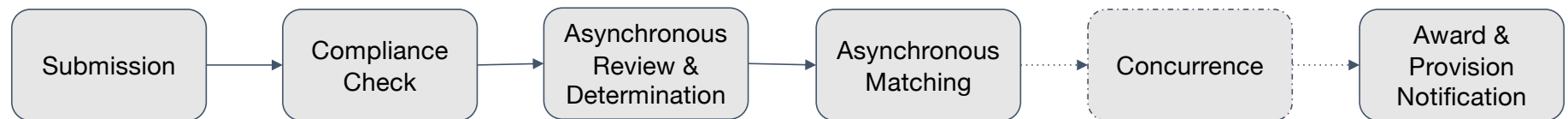
- Undergraduate Courses
- Graduate-level courses
- Workshops
- Research Summer Schools/Training Series





NAIRR Classroom Review Process

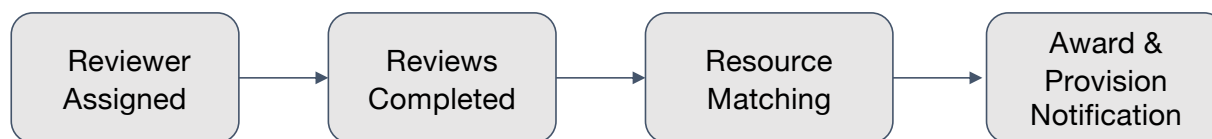
NAIRR Classroom Review Process Summary



NAIRR Classroom Asynchronous Review

Please prepare your submissions with significant time prior to the start of your educational activities and ramp-up time.

This review process may take up to the order of ~1 month.



NAIRR Classroom Request Life Cycle Summary

- *You submit your NAIRR Classroom Request*
- *Initial Review – matches NAIRR areas/priorities, formatting, includes required information*
- *May be “Returned For Corrections”*
- *Review by Review Panel Member – for educational merit/objectives, planned use of resources*
- *Matching to Resource Provider (RP)*
- *Approval/Award Notification!*
- *Within ~1 week, provisioning of resources*
- *Periodic and Final Progress Reporting after award (Extensions and Supplements Possible), cite NAIRR*



NAIRR Classroom Submission Process

NAIRR Classroom Submission: Required ACCESS ID

All NAIRR Classroom PIs,
Senior Personnel and
Users must create an
ACCESS ID for

- Application system
- Portal/Project
Management System
- Internal maintenance
and monitoring

[Integration News](#)[System Status News](#)[Focus Areas ▼](#)[Infrastructure ▼](#)[FAQs](#)[Help](#)[Home](#) / [OPERATIONS](#) / [ACCESS IDENTITY MANAGEMENT](#) / [ACCESS USER REGISTRATION](#)

XSEDE Users

- Your ACCESS ID is the same as your XSEDE Portal account. Please do not create a new ACCESS ID.
- You do not need to change your password or your Duo registration for ACCESS.
- Select the "ACCESS CI (XSEDE)" identity provider to log on using your XSEDE account.

Avoid Creating Duplicate Accounts

If you already have an XSEDE or ACCESS account, please do not create another one. Select the "ACCESS CI (XSEDE)" identity provider to log on using your existing XSEDE/ACCESS account. You can [request a username reminder](#) and/or [reset your password](#) to continue using an existing account. If you're having trouble accessing an existing account, please [contact us](#) rather than creating another one.

<https://operations.access-ci.org/identity/new-user>

NAIRR Classroom Submission: Preliminary Info

A preliminary form giving details on:

- Project Title, Abstract and Keywords
- Fields of Science
- Supporting Grant Information (not required for NAIRR Classroom)
- Estimated Start Dates/Start-up Dates
- Estimated Course End Dates
- NAIRR PI Attestation: US-based

NAIRR Classroom

Request Information

Request Title: *

Enter request title here

Public Abstract: *

Type your public abstract here

Keywords (separated by commas):

Enter keywords separated by commas like astronomy, stars

Fields of Science

To add a field of science select one from the list and check whether or not it is a primary one. To add

☐ Primary -- Please select one -- Remove

Supporting Grants

Because of the large public component of the NAIRR Pilot, researchers are strongly encouraged to report all funding grants directly or closely related to the work described in your NAIRR Open proposal. While a supporting grant is not required, proposals without a funding award will be subject to additional review. *Note:* NAIRR Classroom proposals are not expected to have supporting grants, but should report them if applicable.

Opportunity Questions

When do you need to have access to NAIRR Classroom resources to prepare for or begin your proposed course or training activities? (Approximate dates are acceptable.)

Please enter your answer *

YYYY-MM-DD

When does the course or training activity associated with this proposal end? (Approximate dates are acceptable.)

Please enter your answer *

YYYY-MM-DD

As PI on this NAIRR Pilot allocations, I attest to the fact that all students who will participate in this classroom activity shall be based in the US and be enrolled at a US-based institution. *NOTE:* If individuals from outside the US participate in NAIRR Pilot projects, it may result in sanctions up to and including cancellation of the project's NAIRR Pilot resource access. *

☐ I so attest.

NAIRR Classroom Submission: Required Documents

- *Supporting Documents, including an NSF-Style CV or biosketch of the lead Principal Investigator for the NAIRR Classroom Project is required.*
- *Main Document (further details next slide), describing educational objectives and compute and support needs*
- ***All documents must be PDF format***

Documents - only PDFs

To add a document select a document type and click "Choose File" (**only PDFs are allowed**). A document title is optional. To add another document click "Add Another Document". To remove a document click "Remove".

Document Title (optional):

Document Type: *

Document (PDF only): *

Required Documents
Main Document
Project Lead CV, biosketch, or resume

NAIRR Classroom Submission: Main Document

*A crucial component of your request, will be the preparation of a **3-page maximum Main Document** that provides details regarding your educational objectives, compute needs, class/training opportunity sizes, and support and preparedness needs*

- *A. Course Description*

Class, Workshop or training?, Duration and Number of trainees, Course Plan, Course Website

- *B. Estimate of Storage, Compute and Other Resources*

CPU/GPU resources, memory and storage requirements, educational interfaces, datasets, latency

- *C. Support Needs*

Installation, Account Set-up, System Access

- *D. Team and Team Preparedness*

Prior NAIRR/HPC training experience, prior course experience etc.



NAIRR Classroom: During Your Award

NAIRR Classroom: RP Start-up & Progress Reports

- After your award is approved and allocated, the Resource Provider will contact you in ~1 week regarding **Start-up Information** for using their system.

Note: Each RP has their own FAQ/Help/Ticket System that can be used to help support your request.

- NAIRR Classroom Requires Periodic **Progress Reporting** during (at mid-term) and after the duration of your Allocation

Progress Reports can be submitted via a common form that is accessed via the NAIRR Portal, more information here:

https://nairrpilot.org/app/site/media/docs/NAIRR_Pilot_Classroom_Reporting.pdf

NAIRR Pilot Classroom Progress Report

NAIRR Pilot Request Number (This can be found in the submission site.)

PI First Name

PI Last Name

PI Email

PI Institution (Affiliation)

Report type:

- ☐ Midterm (halfway through the course or training session)
- ☐ Final (within 30 days of the course/training session's completion)
- ☐ ad hoc (to accompany an extension or supplement request)

Most of my students/attendees are able to utilize the resources.

- ☐ Yes
- ☐ No
- ☐ Other

https://nairrpilot.org/app/site/media/docs/NAIRR_Pilot_Classroom_Progress_Report.pdf



NAIRR Classroom FAQs

NAIRR Pilot Frequently Asked Questions

- ***What capabilities does each Resource Provider (RP)/system provide? What if I am unsure?***

We provide an overview of RP capabilities on the webpage, click drop-downs to see more detailed descriptions, with RP linkouts describing specific functionality

- ***How can I calculate how many resources I will need for a given RP?***

Some RPs provide “calculators” for resources on their systems. For most others we use the unit “number of students” (number of unique participants) to describe resource estimates

- ***What if I want to sustain my course/project/training across multiple semesters?***

You may explain this in your pre-submission form, and “Main Document” under “Course Description”. If this occurs to you during the course of the project, you may submit an “Extension” Request.

- ***What is the typical processing time for a request/proposal?***

Typical processing time is on the order of 1 month or less (NOTE: delays can occur due to resource changes/resource matching issues).

- ***What is the typical processing time for a help ticket?***

Typical processing time is approximately 1 week (NOTE: delays can occur in if user responses are delayed)

- ***Where can I access examples of awarded projects***

These are published on the NAIRR website

- ***What are some examples of the types of interfaces does each Resource Provider (RP) Provide in the context NAIRR Classroom?***

Several classroom RPs provide notebook (e.g. Jupyterhub, Vocareum AI Notebook), and Inferencing services.

Full Help/FAQs: <https://nairrpilot.org/help/faq>



Thank you!

help@allocations.nairrpilot.org

<https://nairrpilot.org>

submit a help ticket (*preferred for support*):
<https://nairrpilot.org/open-support-request>