

NAIRR Pilot

National Artificial Intelligence
Research Resource Pilot



Introduction to NAIRR and ACCESS – Empowering Research & Education with Advanced Computing Resources

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Have you ever asked yourself...

- Are you afraid that you could lose your job because it could be done faster, better, and more efficiently?

**Annoying and ambitious
co-worker**

- Do you feel like you have no control over decisions being made anymore?

Advertising

- Do you wonder if your own personal data is being used against you?

**My phone is listening to
me**

Why are you here?

- FOMO?
- Research Enablement
- Teaching
- Workforce development
- Resource discovery
- Collaboration and networking
- Fear
- My boss/spouse/kid/mom told me to come



Source:
ChatGPT

Why is everything suddenly about AI?

- Technology leaps became visible
- The “wow” factor is immediate
- Consumer interface
- Infrastructure caught up
- Large industry investments





AI and Advanced Computing

- Data-driven research and AI are transforming every discipline
- AI and High Performance Computing (HPC) are converging
- AI depends on HPC
- HPC benefits from AI
- National programs are making these capabilities more accessible than ever
 - NAIRR
 - ACCESS

What is NAIRR?

- AI resource access for all
- Government and non-government partners
- Focused on enabling research, education, and workforce development

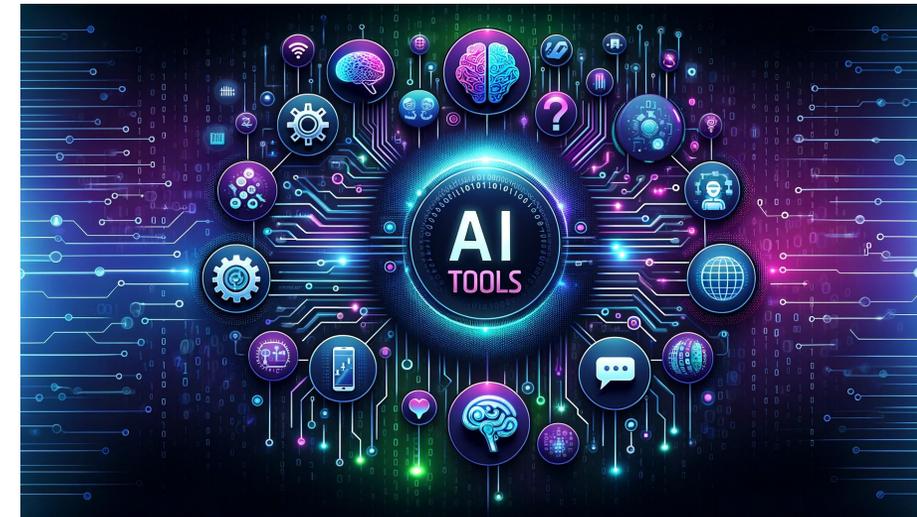


What is available?

- Access to some of the premier AI resources in the country
 - Computational infrastructure
 - Tools, models, and software
 - Datasets
 - Training and educational resources

Source:

<https://edure.in/top-ai-tools-for-freshers-to-get-a-job-in-2025/>



What is ACCESS?

- Advanced compute, data, networking, software
- Combines resources and expertise
- Supports scientific discovery
- Some of the largest systems in the country



ACCESS is a program established and funded by the U.S. National Science Foundation to help researchers and educators, with or without supporting grants, to utilize the nation's advanced computing systems and services – **at no cost to you.**

ACCESS vs. NAIRR



- Many similarities
 - Share many resources
 - Structure
 - Operational teams
- Provide ability to share knowledge and processes



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Who are these resources for?

You!

No experience necessary!
No cost to you!

- Faculty and researchers across disciplines
- Students and educators integrating AI and data science
- Any application domain of AI
- Any — or no — source of funding

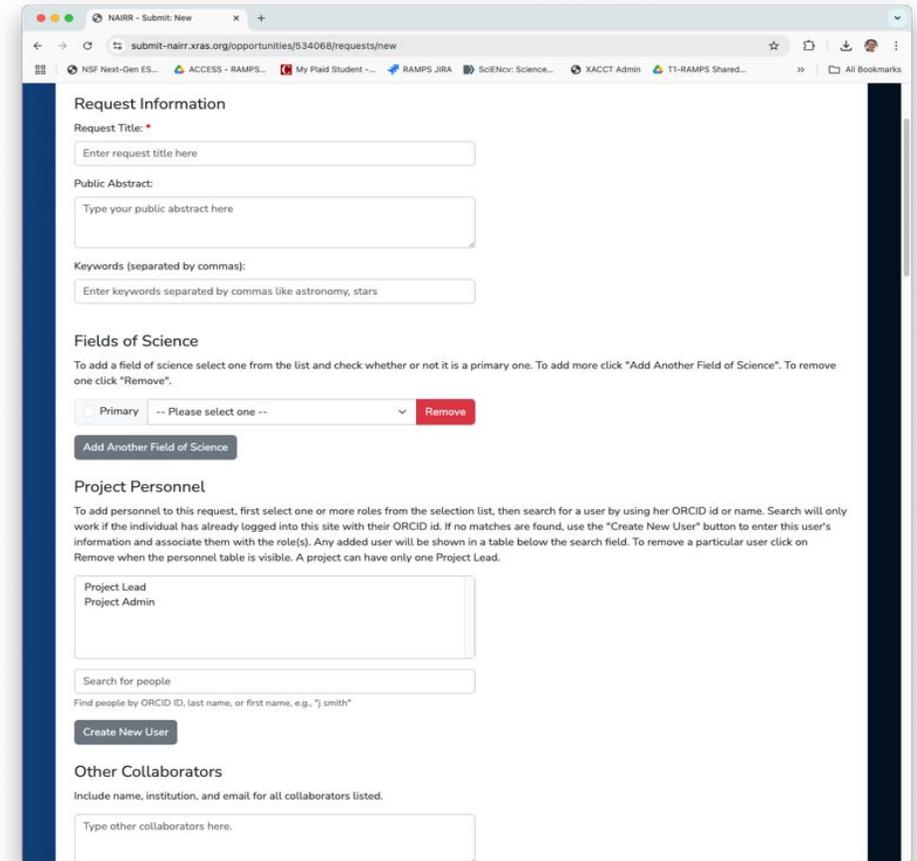
for the research

Example use cases

- Earth system science
 - Detect extreme events, predict wildfire spread
- Genomics and biomedical data analysis
 - Identify genetic risk factors and accelerate drug discovery
- Social science data mining and NLP
 - Analyze historical archives, legal documents
- AI integration into courses and curricula
 - Build hands-on curricula

What do you need to get started?

- Apply for an allocation
- The idea for the work
- The ability to carry it out
- Information about your project



The screenshot shows a web browser window with the URL `submit-nairr.xras.org/opportunities/534068/requests/new`. The page is titled "Request Information" and contains several sections for data entry:

- Request Title:** A text input field with the placeholder "Enter request title here".
- Public Abstract:** A larger text input field with the placeholder "Type your public abstract here".
- Keywords (separated by commas):** A text input field with the placeholder "Enter keywords separated by commas like astronomy, stars".
- Fields of Science:** A section with instructions: "To add a field of science select one from the list and check whether or not it is a primary one. To add more click 'Add Another Field of Science'. To remove one click 'Remove'". It includes a "Primary" checkbox, a dropdown menu with "-- Please select one --", and a "Remove" button. Below this is an "Add Another Field of Science" button.
- Project Personnel:** A section with instructions: "To add personnel to this request, first select one or more roles from the selection list, then search for a user by using her ORCID id or name. Search will only work if the individual has already logged into this site with their ORCID id. If no matches are found, use the 'Create New User' button to enter this user's information and associate them with the role(s). Any added user will be shown in a table below the search field. To remove a particular user click on Remove when the personnel table is visible. A project can have only one Project Lead." It includes a dropdown menu with "Project Lead" and "Project Admin" selected, a "Search for people" input field with the placeholder "Find people by ORCID ID, last name, or first name, e.g., 'j smith'", and a "Create New User" button.
- Other Collaborators:** A section with instructions: "Include name, institution, and email for all collaborators listed." It includes a text input field with the placeholder "Type other collaborators here".

NAIRR Pilot Community Resources

The NAIRR Pilot aims to connect U.S. researchers and educators to computational, data, and training resources needed to advance AI research and research that employs AI. Federal agencies are collaborating with government-supported and non-governmental partners to implement the Pilot as a preparatory step toward an eventual full NAIRR implementation.

Metric	Value	Action
Research projects supported	390+	View Projects Map
States + DC represented	43	View Resource Allocations
NAIRR Classroom awards	38	
Infrastructure & data demo projects	23	
Community workshops (more scheduled)	3	

<http://www.nairrpilot.org>

This is the primary
source of information
about all things
NAIRR Pilot!

Slide Courtesy of Layla
Freeborn, CU Boulder Research
Computing

NAIRR Pilot Community Resources



@NAIRRPilot

<http://www.youtube.com/@NAIRRPilot>

Recordings of past events (e.g.,
Showcases)

**Attend an upcoming event or
training session**

<https://nairrpilot.org/pilotevents>

You or someone you're supporting has a NAIRR Pilot allocation and a question about your resource.

Where can you turn for help?

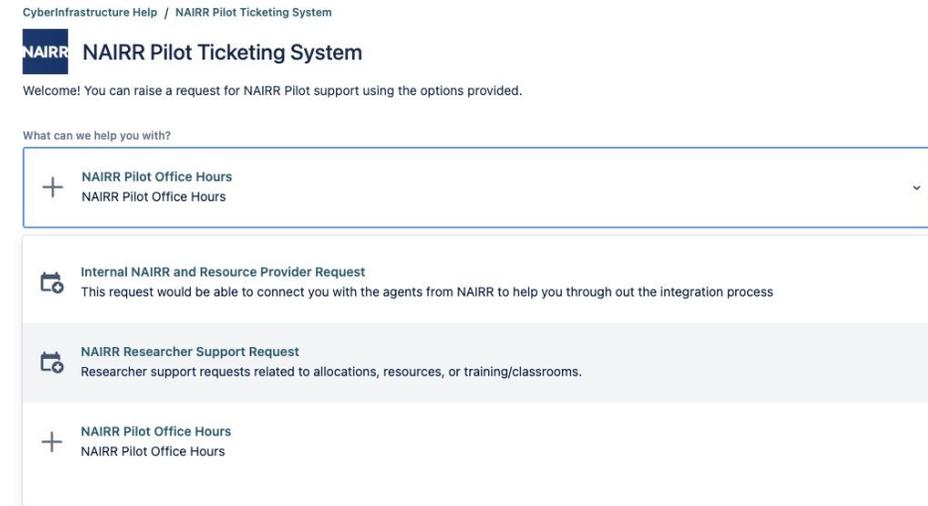
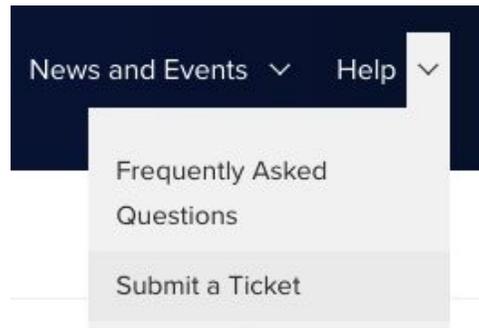
Getting Help with NAIRR Pilot

Resources

Attend NAIRR Pilot Office Hours

Resource Provider Office Hours

Industry Partner Office Hours

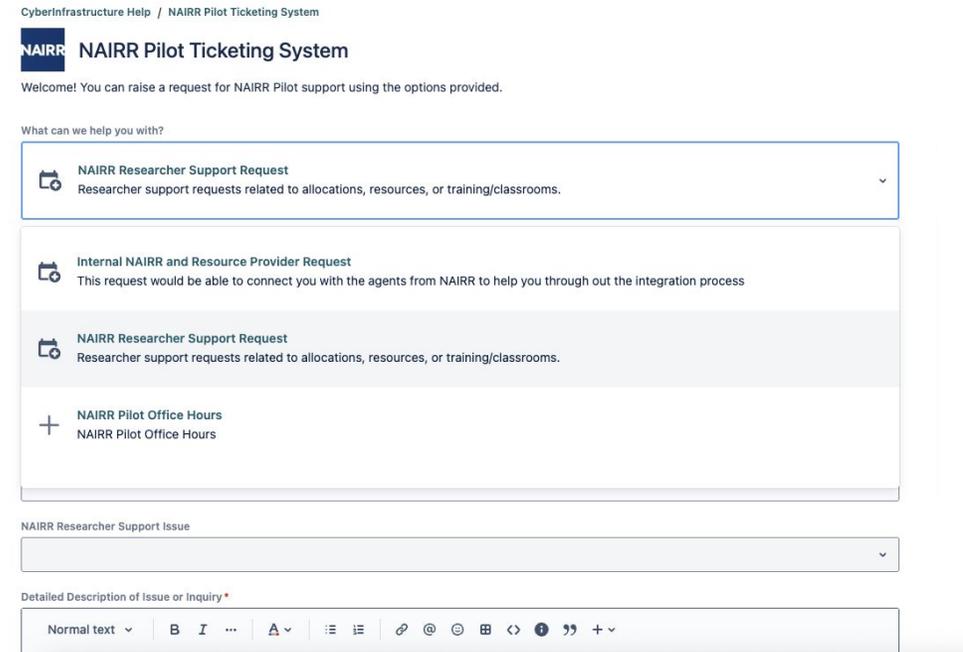
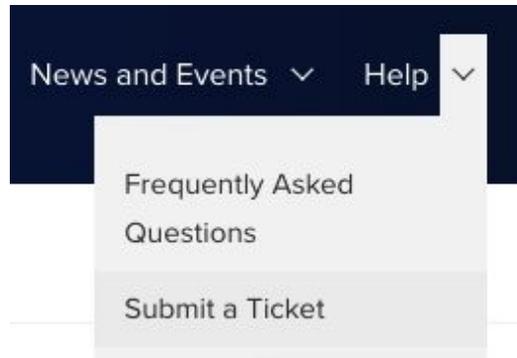


Slide Courtesy of Layla
Freeborn, CU Boulder Research
Computing

Getting Help with NAIRR Pilot

Resources

Ask questions or request a consultation by submitting a ticket



NAIRR Pilot User Experience

User Experience Working Group

Marisa Brazil (ASU)

* Shelley Knuth (CU Boulder)

* Alana Romanella (CU Boulder)

Nitin Sukhija (SRU)

User Experience Team

Ewa Deelman (USC)

Lori Flora (CU Boulder)

Layla Freeborn (CU Boulder)

James Griffioen (UK)

* Shelley Knuth (CU Boulder)

Alana Romanella (CU Boulder)

Barbara Schnell (CU Boulder)

Address questions such as

- What is the user experience like?
- What recommendations do we have to best meet user needs?
 - Office hours, consultations, ticketing
 - Trainings & webinars

Work with Resource Providers, other NAIRR Pilot WGs and teams.

Slide Courtesy of Layla Freeborn, CU Boulder Research Computing

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Work with other NAIRR Pilot teams (Allocations, Ticketing System, Website, SC�PE teams) to coordinate and implement recommendations.

Slide Courtesy of Layla Freeborn, CU Boulder Research Computing

What have we learned so far?

- AI is the gateway drug
- Tools and research
- New people – more help
- Design your own!



- National and Regional workshops
 - April - Denver
 - August - RMACC
 - October - Kentucky  **You are here**
 - January – USC
 - April - OSC
- Researcher showcases



Questions?

- <https://nairrpilot.org/>
- knuths@colorado.edu



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Support