NSF Chishiki SCIPE AI Fellowships

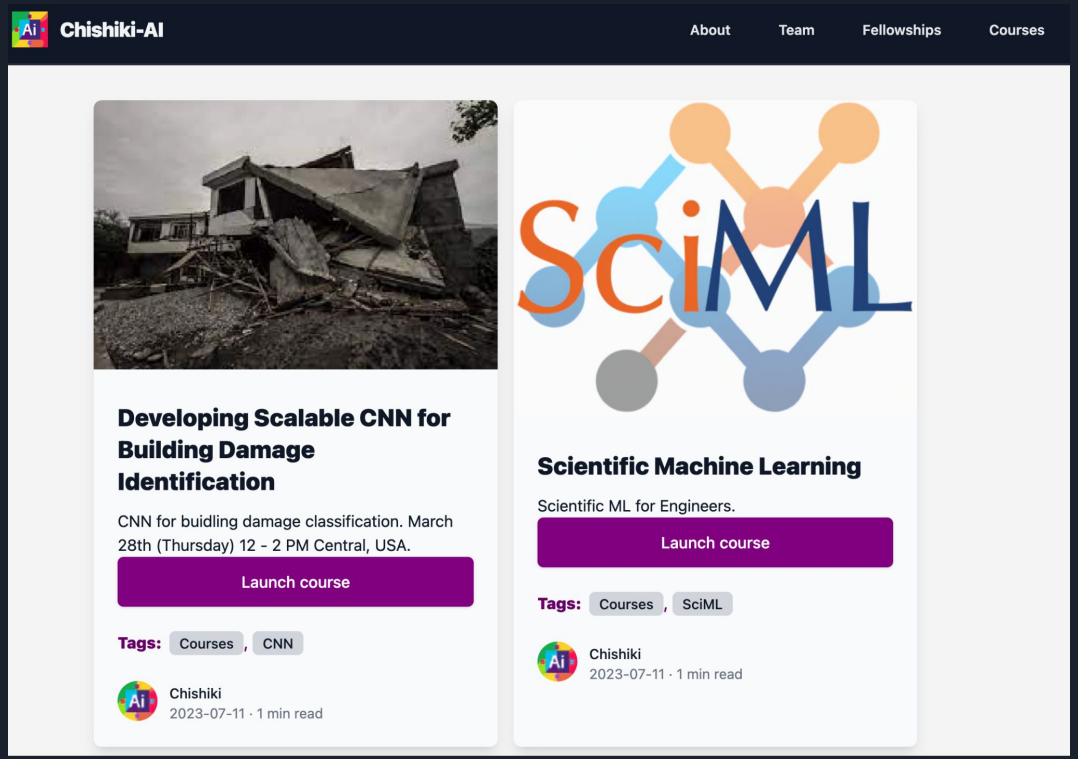
Information Webinar Jan 22nd at 12 PM CT

What is Chishiki-AI?

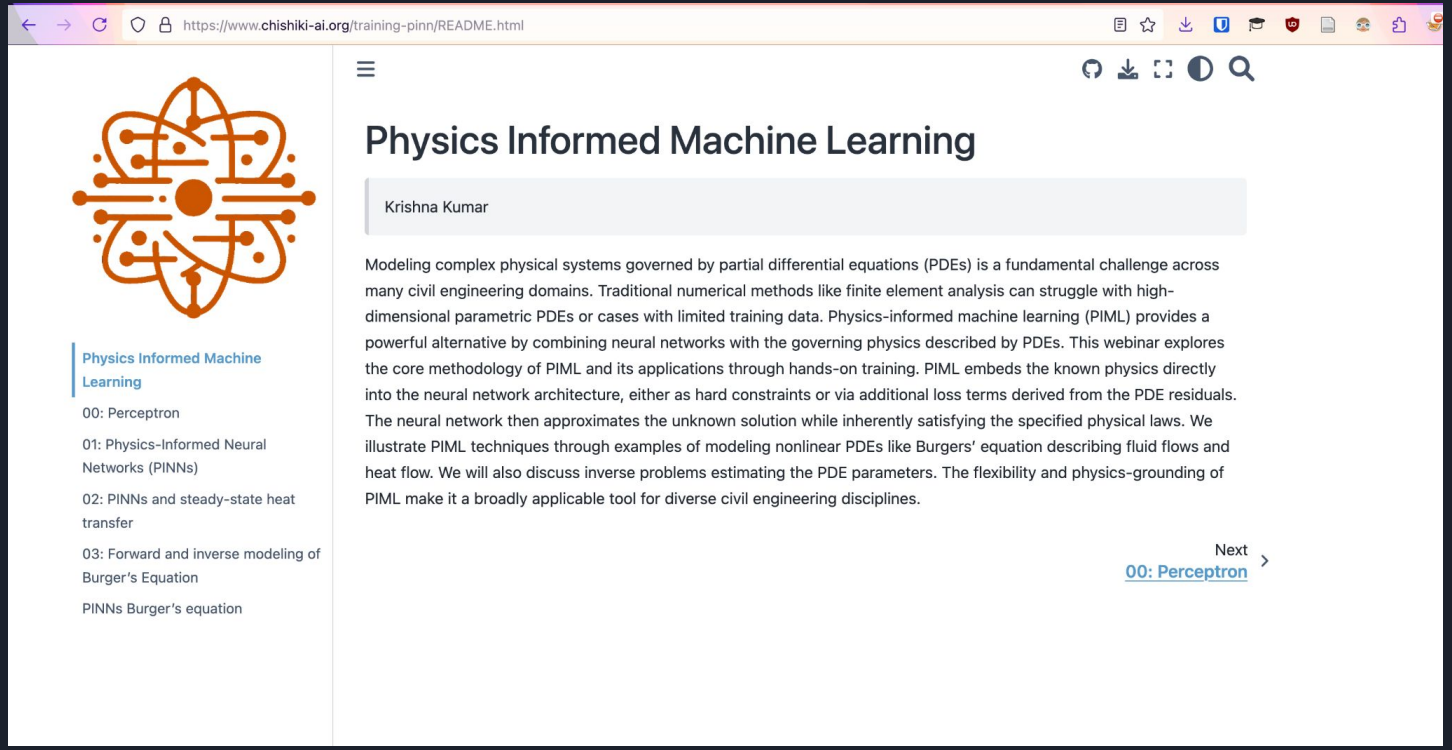
- Chishiki means Knowledge in Japanese
- AI-powered Civil Engineering Community
- NSF has awarded a $7 million grant to Chishiki.ai, an innovative project spearheaded by the University of Texas at Austin in collaboration with Cornell University.
- Chishiki.ai is a groundbreaking initiative designed to revolutionize the field of Civil and Environmental Engineering (CEE) through the integration of artificial intelligence (AI)

2024 Chishiki Research summit and hackathon

Chishiki Courses



Chishiki Webinar



Chishiki AI powered Civil Engineering Community

- Annual Fellowships for graduate and undergraduate students working in AI in Civil Engineering
- 5 Graduate Fellowships ($37k + tuition + travel)
- 5 Undergraduate Research scholarships
- Application Deadline February 7, 2025 11:50 pm ET
- Submit Applications through NSF ETAP
- Hackathons/Trainings/Virtual Workshops

https://www.chishiki-ai.org/

Chishiki Graduate Fellowships

Program Dates: June 1, 2025 – May 31, 2026

Application Deadline: February 7, 2025, 11:59 pm ET

5 Fellowships

Fellows will receive:

- $37,000 stipend in two installments of $18,500
- Up to $12,000 in tuition allowance throughout the year
- Travel support to present research results at a SCIPE AI in Civil Engineering community event and/or professional conference
- Paid visits to UT Austin and TACC in Austin, TX

Eligibility

- Be enrolled as a graduate student at the time of application
- Be interested in working in the area of Artificial Intelligence, Civil Engineering and Cyber Infrastructure
- Have completed at least two semesters of their graduate program at the start of the Fellowship
- Have at least one full year remaining in their program as of June of the year of award
- Be enrolled in a US institution and studying in the United States or one of its territories
- Be able to spend at least one week during the summer semester in residence at TACC in the year of award (roughly June and July, but will vary according to your school's calendar)

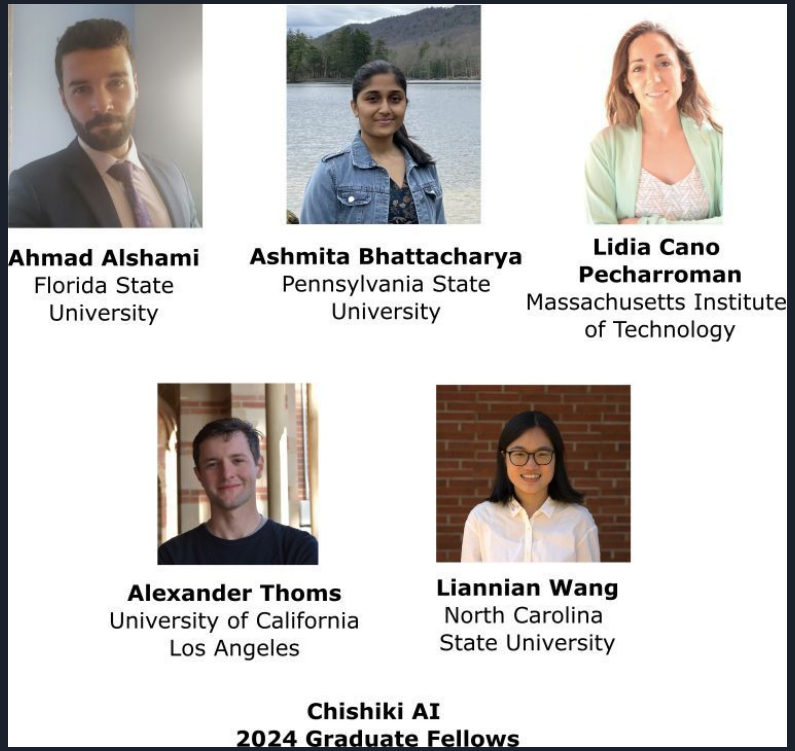
Application Requirements

- **Contact and demographic information.**
- **Project title and abstract**
- **Personal statement** - Tell us about your personal, professional, and educational experiences and future career goals. Include specific examples of any research and/or professional activities in which you have participated, and whether you held leadership roles. Specify your role in the activity including the extent to which you worked independently and/or as part of a team, and how you contributed to the team's activity. Tell us why you would make an outstanding SCIPE AI in Civil Engineering Fellow.
- **Research statement** - research idea and how data analysis, visualization and parallel computing resources are critical to addressing the research topic; how the research will advance knowledge and understanding within the field of study; how this opportunity would further research goals and accelerate or expand the impact of the research. Any graphs or charts included in your research statement will not be included in the word count.
- **Your entire submission must not exceed 3 pages with a minimum font of 11 points and 1-inch margins on all sides.**
- **Two letters of references**

Application Evaluation Criteria

- Potential application areas of AI in Civil Engineering include, but are not limited to, computer vision techniques for structural health monitoring, automation in construction, robotics in extreme environments, AI-accelerated simulations, AI-enabled knowledge discovery, AI for natural hazards engineering, and AI for mobility, water, and energy.
- Alignment with program on effectively using AI and CyberInfrastructure to solve critical civil engineering challenges.
- Articulate the need for AI/CI research in civil engineering.
- Novel use of AI algorithms or development of AI algorithms to solve complex civil engineering challenges.
- Research Objectives are well defined and have some preliminary results/proof of concepts.
- Methodology described is feasible and novel application of AI.
- How the fellowship will help you grow as an AI/CI expert in Civil Engineering - Also share your vision for the field.
- Effective utilization of TACC computing resources to advance the field.

2024 Chishiki AI Graduate Fellows



Chishiki Undergraduate Studentships

Program Dates: June 1, 2025 – June 30, 2025

Application Deadline: February 7, 2025 11:59 pm ET

3 – 5 Studentships

Fellows will receive:

- Stipend of $7,000
- Paid travel to Austin, TX

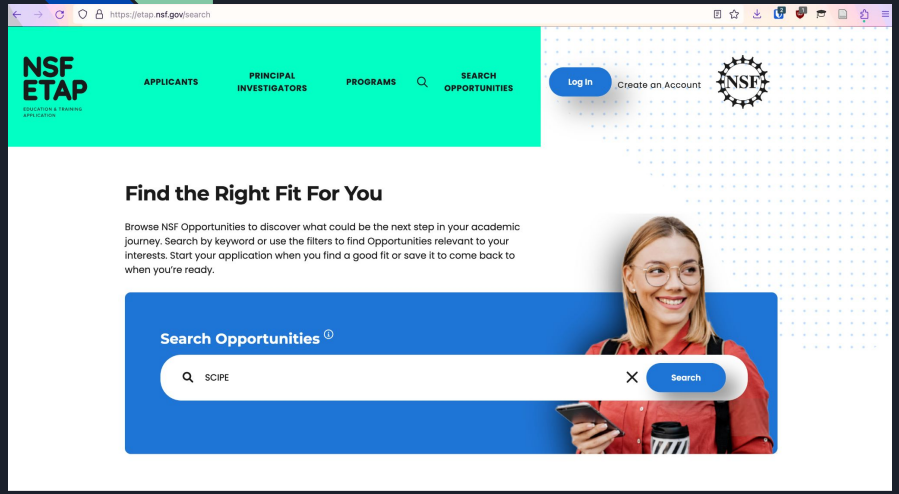
Eligibility

- Enrolled as an undergraduate student
- Completed at least one year of your undergraduate program by March 2025
- At least one full year remaining in your program as of June 2025
- Spend at least one month in residence at UT Austin/TACC during the summer semester

Application Requirements

- **Contact and demographic information.**
- **Project title and abstract**
- **Personal statement** - Tell us about your personal, professional, and educational experiences and future career goals. Include specific examples of any research and/or professional activities in which you have participated, and whether you held leadership roles. Specify your role in the activity including the extent to which you worked independently and/or as part of a team, and how you contributed to the team's activity. Tell us why you would make an outstanding SCIPE AI in Civil Engineering Fellow.
- **Research statement**- research idea and how data analysis, visualization and parallel computing resources are critical to addressing the research topic; how the research will advance knowledge and understanding within the field of study; how this opportunity would further research goals and accelerate or expand the impact of the research. Any graphs or charts included in your research statement will not be included in the word count.
- Your entire submission must not exceed 3 pages with a minimum font of 11 points and 1-inch margins on all sides.
- **Two letters of references**

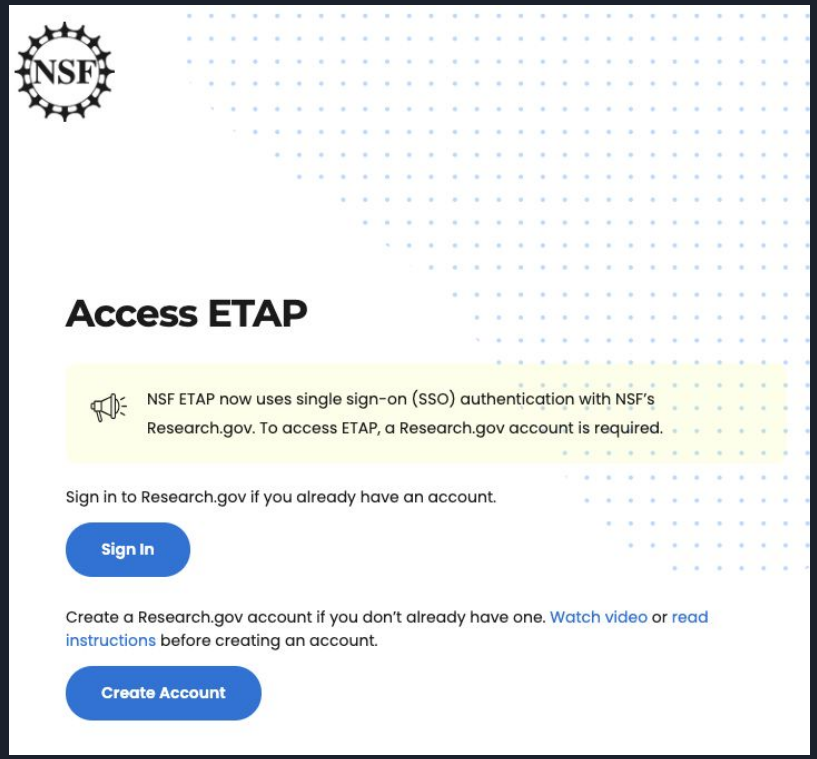
NSF ETAP

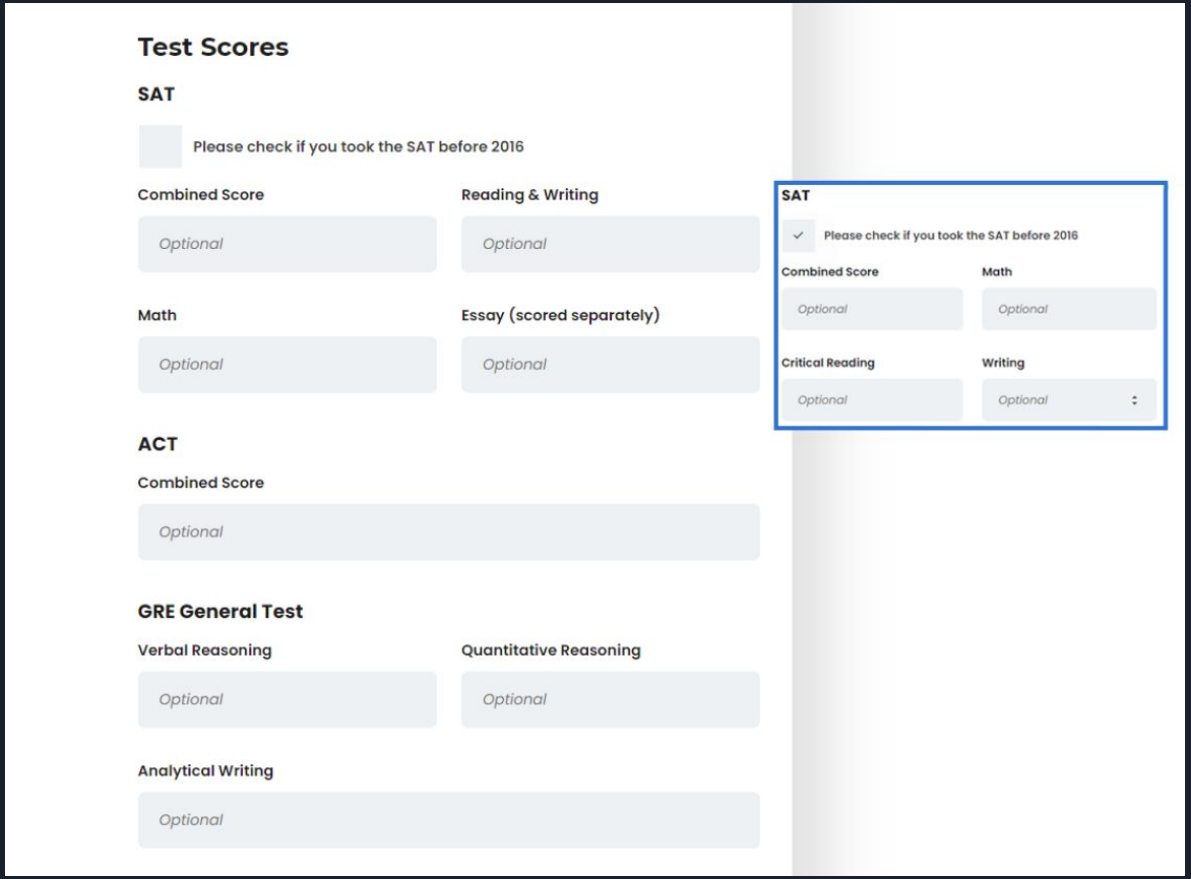


Published	**#2321040** SCIPE AI in Civil Engineering Undergraduate Research Scholarship	Open Competition	06/01/2025 - 06/30/2025	11/11/2024 - 02/07/2025
Published	**#2321040** SCIPE AI in Civil Engineering Graduate Student Fellowship	Open Competition	06/01/2024 - 05/31/2025	11/11/2024 - 02/07/2025

APPLICATION PROCESS

- Must apply through NSF's ETAP Application website
- You will be required to create a research.gov account, which will link to your NSF ETAP account
- Outside of any individual application you submit, NSF requires you to complete a comprehensive demographic survey when you create an account; not all of this information will be used when considering your application (this information is largely used for NSF's own data analysis)





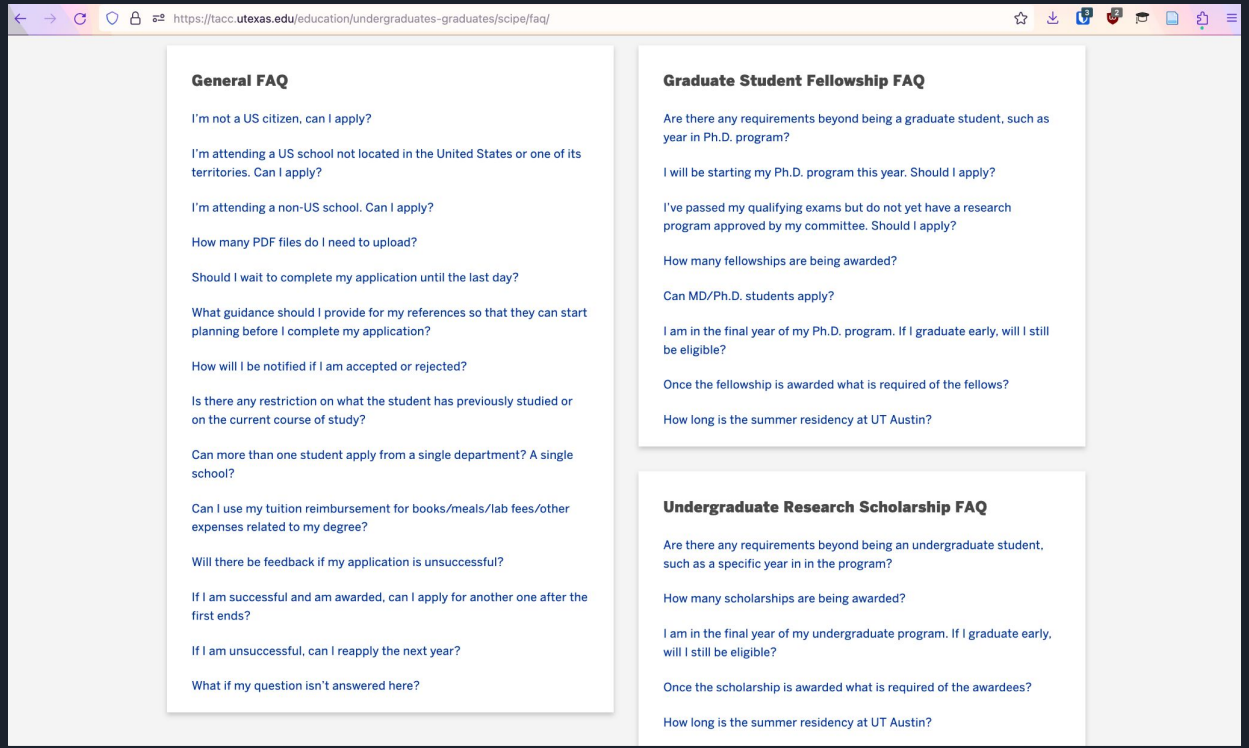
FOR EXAMPLE

Don't worry if you didn't take the SAT/ACT/GRE – this is information NSF uses for their own data analytics but that we do not take into consideration for the Frontera application process.

A FEW LAST COMMENTS:

- Do not wait until your recommendation writers have sent in their letters to hit “submit” in your application. When the application window closes and I see an application missing a recommendation letter, I will reach out to the letter writer with a reminder requesting the LoR.
    - It is better for you to send in an incomplete application that I can follow up on than to submit no application at all.
- Please pay attention to the submission time zone. If you miss the submission deadline because you waited until the last minute and did not realize the deadline was in the Eastern time zone, you will be out of luck!

FAQs


https://tacc.utexas.edu/education/undergraduates-graduates/scipe/faq/
General FAQ
I'm not a US citizen, can I apply?
I'm attending a US school not located in the United States or one of its territories. Can I apply?
I'm attending a non-US school. Can I apply?
How many PDF files do I need to upload?
Should I wait to complete my application until the last day?
What guidance should I provide for my references so that they can start planning before I complete my application?
How will I be notified if I am accepted or rejected?
Is there any restriction on what the student has previously studied or on the current course of study?
Can more than one student apply from a single department? A single school?
Can I use my tuition reimbursement for books/meals/lab fees/other expenses related to my degree?
Will there be feedback if my application is unsuccessful?
If I am successful and am awarded, can I apply for another one after the first ends?
If I am unsuccessful, can I reapply the next year?
What if my question isn't answered here?
Graduate Student Fellowship FAQ
Are there any requirements beyond being a graduate student, such as year in Ph.D. program?
I will be starting my Ph.D. program this year. Should I apply?
I've passed my qualifying exams but do not yet have a research program approved by my committee. Should I apply?
How many fellowships are being awarded?
Can MD/Ph.D. students apply?
I am in the final year of my Ph.D. program. If I graduate early, will I still be eligible?
Once the fellowship is awarded what is required of the fellows?
How long is the summer residency at UT Austin?
Undergraduate Research Scholarship FAQ
Are there any requirements beyond being an undergraduate student, such as a specific year in in the program?
How many scholarships are being awarded?
I am in the final year of my undergraduate program. If I graduate early, will I still be eligible?
Once the scholarship is awarded what is required of the awardees?
How long is the summer residency at UT Austin?

Join Us

Register to be a member at: https://www.chishiki-ai.org/

Fellowship information:
https://tacc.utexas.edu/education/undergraduates-graduates/scipe/

LinkedIn: https://linkedin.com/company/chishikiai

Slack: https://chishiki-workspace.slack.com

Contact us: scipe@tacc.utexas.edu