*This is a preview of the online application! Please submit your application online at* <https://utexas.qualtrics.com/jfe/form/SV_6hRjkYRBJZjBY10>

If you need to mail a paper copy of your application, you can complete this form and please mail it to:

Dana Thomas

Jackson School of Geosciences

2305 Speedway Stop C1160
Austin, TX 78712-1692

PREVIEW JSG RTX Trainee Application 2024

Start of Block: All

The Jackson School of Geosciences 2024 Research Traineeship Experience (RTX) is a paid opportunity for undergraduates and recent graduates to prepare for graduate school and subsequent academic and non-academic professional careers in geoscience. RTX participants engage in a collection of training modules on data analytics, computational techniques, digital tools and programs used in geoscience. Students concurrently progress through a guided independent research project with JSG mentors. Throughout the summer, everyone participates in workshops to develop personally and professionally.

The RTX takes place from June 3-August 2, 2024 and is an in-person, residential experience at UT Austin. However, if your ability to participate is dependent on a certain modality, then we will take into account what is best for you.

Please apply by Friday, February 23.
Application review will begin after this date. Applications may continue to be accepted until all positions are filled.

We welcome applications from students who are studying geoscience or an allied STEM field (e.g. Computer Science, Chemistry, Engineering, Math, Physics, etc.). We encourage applications from students who attend an HBCU, MSI or HSI, as well as alumni of GeoFORCE. Preference will be given to students who attend universities other than UT Austin, though all applicants will be considered, especially those from outside the Jackson School. You will receive compensation for participating in the RTX relative to the level of engagement.

For more details on the RTX and eligibility, please visit https://www.jsg.utexas.edu/education-360/programs/undergraduate-research-traineeship-experience/ or email Dr. Dana Thomas at dthomas@jsg.utexas.edu.

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**Section 1: Basic Information**

Q3 First Name

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q4 Last Name

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Q5 Email address

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q6 Phone number

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q7 How did you learn about the RTX application?

* Through GeoFORCE or STEMFORCE (via Dr. Dana Thomas)
* Through GSA On to the Future
* From a contact at Fort Valley State University or CDEP
* Another way (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q8 Did you participate in GeoFORCE or STEMFORCE in high school?

* Yes
* No

Display This Question:

If Did you participate in GeoFORCE or STEMFORCE in high school? = Yes

Q9 If you participated in GeoFORCE or STEMFORCE, please select the region you are from

* Houston
* Southwest Texas
* Austin
* Dallas
* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 2: Education**

Q11 What college or university do you attend? (If you have already completed a Bachelor's degree, choose the university from where you earned it.)

* University of Texas at Austin
* University of Houston
* Texas A&M University
* UTSA
* Texas State University - San Marcos
* Texas Tech University
* Huston Tillotson University
* Fort Valley State University
* Austin Community College
* Houston Community College
* Southwest Texas Junior College
* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q12 What is your class level? (Select the one that matches best.)

* Freshman
* Sophomore
* Junior
* Senior
* Post-baccalaureate

Q13 Expected college graduation date (if already received degree, input when received)

* Semester (e.g. Spring) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Year (e.g. 2024) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q14 Which degree you are pursuing (or have earned)?

* AS
* BA
* BS
* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q15 Please select the option that best describes the degree you are earning.

* Geosciences
* STEM (non-geosciences, includes bio and engineering)
* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q16 What is your primary major (e.g. Geological Sciences)?

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Q17 Secondary major, if applicable

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Q18 Minors or certificates, if applicable

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**Section 3: Program Information**

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Q20 Please select the three subdisciplines of geoscience that interest you most. You can learn more about the research done at the JSG by visiting this site: http://www.jsg.utexas.edu/research/.

* Climate & Atmospheric Science
* Glaciology & Ice Sheet Dynamics
* High-temperature Geochemistry & Fluid-Rock Interactions
* Hydrogeology, Drought & Water Resource Sustainability
* Low-temperature Geochemistry, Soils & Carbon Cycling
* Mantle Dynamics & Earth's Interior
* Paleontology, Paleobiology & Paleoceanography
* Planetary Geology
* Sedimentology, Fluvial Processes & Geomorphology
* Structural Geology, Tectonics & Metamorphic Petrology
* Volcanology
* Energy Geosciences & Reservoir Characterization
* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q21 Which of the following skills, techniques or methods would you be *most* interested in cultivating or using this summer?

* Numerical modeling (using mathematics and physics to simulate Earth processes)
* Applying machine learning to geoscience problems
* Extracting and analyzing data from maps, satellite images, drone photos, etc.
* Working with large datasets and applying statistical methods
* Doing experiments in a laboratory
* Performing analytical work or using laboratory instruments to collect data
* Conducting field-based investigations in outdoor settings
* I would really like to... \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q22 Please describe any computer programming or geospatial software experience you have. *Prior experience is not a requirement, and a lack of experience is not counted against your application.* Instead, this information will be used to plan the program and best match you with mentors if accepted.

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Q23 Please indicate if you have experience with the following. *Research experience is not a requirement to participate in the RTX.* We just want to know your background. Select all that apply.

* I have written research papers (term papers) for courses, but never collected my own data.
* I have done a research project for a course in which I collected data or analyzed an existing data set.
* I have done research with a faculty mentor on an independent project.
* I'm not sure if I have had research experience or not.
* Describe any other experiences with research that you have had. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q24 Please indicate your interest in the following. If you don't know what going to graduate school entails, that is okay!

|  |  |
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|  |   |
|  | I don't know enough to say. | Not interested at all | Slightly interested | Moderately interested | Very interested | Extremely interested |
| Pursuing a geoscience graduate degree (M.S. or PhD)  |  |  |  |  |  |  |
| Applying to the Jackson School of Gesociences for a graduate degree  |  |  |  |  |  |  |
| Pursuing a different graduate degree, including professional degrees such as an M.D. (please input).  |  |  |  |  |  |  |

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**Section 4: Academic and Personal Information**
The following questions will help us determine if you are a good candidate for the RTX. We suggest composing your answers on a separate document and then pasting them here. Please keep in mind that the selection process takes a holistic approach in evaluating your qualifications. If you have any questions, please email Dr. Dana Thomas at dthomas@jsg.utexas.edu.

Q26
Educational and Career Goals
The RTX is unique in that it blends training and research. It offers the opportunity to gain exposure to a wide array of geoscience topics and also do a deeper dive into one area.

Why does the RTX appeal to you? What are your scientific interests and how do they relate to your educational and career goals? What impact do you think participation in the RTX could have on your future?

**Write at least 200 words but no more than 350 words. Please be sure to address all questions.**

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Q27
Your RTX "Fit"
Students who benefit the most from the RTX are self-motivated, have experience managing their time wisely, and enjoy working through challenges independently and in groups.

Please describe a few examples from your own experiences (academic, job-related, personal and family responsibilities) that show you can succeed in the RTX.

**Write at least 200 words but no more than 350 words.**

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Q28
The RTX Mission, Geoscience and You
The mission of the RTX is more than to prepare trainees with technical skills and research abilities. With the RTX, we are working to create a geoscience community that is resilient, creative and bold.

Please describe how you, based on your personal background and life experiences (including social, cultural, familial, educational, or other opportunities or challenges) will contribute to this mission during and after participation in the RTX.

 **Write at least 200 words but no more than 350 words.**

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Q29 GPA (e.g. 3.20)

* Cumulative GPA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Major GPA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q30
Please upload a file that shows your cumulative GPA and all college courses taken. This can be an unofficial transcript or a grade report.

Please name the file as follows: LastName\_Grades\_RTX2024.

Q31
OPTIONAL: You may upload a resume here.

Please name the file as follows: LastName\_Resume\_RTX2024.

Q32 Please name someone who can serve as a reference for you, such as an employer, a faculty member, mentor or supervisor. They do not need to write a letter of recommendation yet, but we may contact them if you are selected to move forward in the application process. They should be able to comment on your commitment, reliability, interest in learning new things and willingness to work through challenges. (Please do not name a family member.)

 *Need help on how to ask someone to be a reference? See* here*, but remember that they won't be writing a letter right now.*

* Full name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Email address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Position \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q33
Is there anything else you would like the RTX selection committee to know about you that hasn't already been covered?

For example, do you feel your academic record accurately reflects your abilities and potential? Why or why not?

You can also use this space to explain if a different modality of participation (such as remote) would be better for you.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Section 5: Demographic Information**
 *This information is collected only for lawful reporting purposes, such as to funding sources including US federal agencies. It is not used as criteria for selection. All of these questions are optional, and you are not required to answer any of them. Most of the answer selections reflect the current language used by the National Science Foundation.*

Q35 Do you have authorization to work or study in the U.S.?

* Yes
* No

Q36 What is your gender?

* Female
* Male
* Non-binary
* I describe my gender differently. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q37 Do you identify as transgender?

* Yes
* No
* I prefer not to disclose this.

Q38 Does either of your parents or guardians have a Bachelor's degree?

* Yes
* No
* I don't know

Q39 Are you or were you ever eligible for a Pell Grant?

* Yes
* No
* I don't know

Q40 Please select the race(s)/ethnicity(ies) that best describes you. You may select more than one.

* American Indian or Alaska Native
* Asian or Indian
* Black or African American
* Hispanic or Latino/a/x
* Native Hawaiian or Other Pacific Islander
* White or Caucasian
* I identify with another race or ethnicity. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q41 Are you a veteran of the U.S. armed services?

* Yes
* No

Q42 Do you identify as LGBTQ?

* Yes
* No
* I prefer not to disclose this.

Q43 What is your disability status? (Select one or more.)

* Visual impairment
* Hearing impairment
* Mobility/Orthopedic Impairments
* None
* Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q44 Do you identify as neurodiverse?

* Yes
* No
* I prefer not to disclose this.

Q45
This concludes the application. Please click next.

End of Block: All