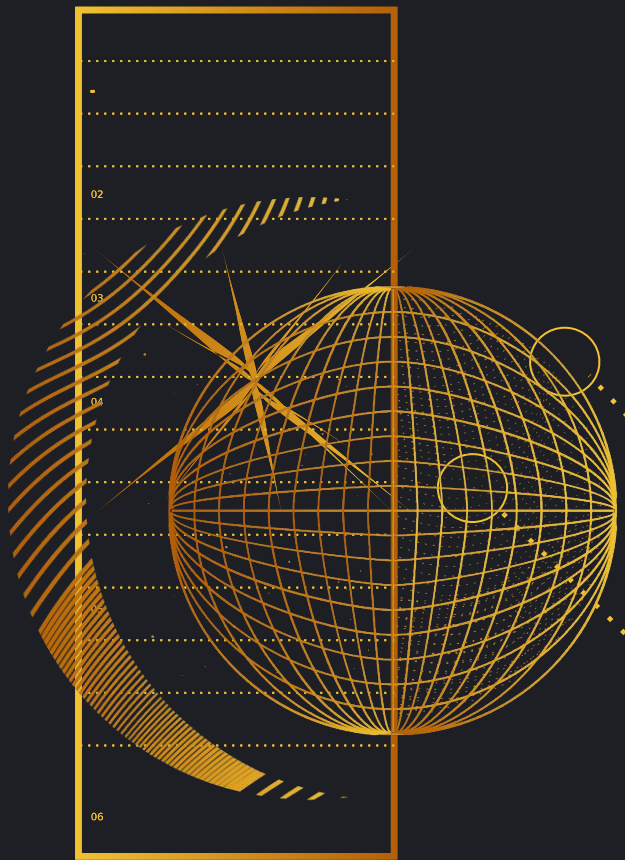




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An Introduction to High School Research and Pursing Internships

By *Rishika Porandla*
TTAS Vice President

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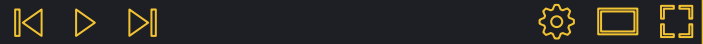
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A Quick Word About NASA SEES



A GUIDE TO INTERNSHIP TIERS

TIER ONE:

The most selective programs in the country, often accepting a single-digit percentage of applicants; university or government affiliated

TIER TWO:

More selective than any programs except Tier 1 programs; directly affiliated with university / faculty

TIER THREE:

Somewhat selective; sometimes, but not always, affiliated directly with university; overly high cost

TIER FOUR

Generally accept students in grades 9 - 12; moderately selective; frequently not affiliated with universities; often offer a good overview of a field / subject without going into great depth



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My Tier 1 Internship Recommendations

PROGRAM	LOCATION	CATEGORY	SELECTIVITY	APPLICATION DATE	DURATION	RESTRICTIONS	COST
<u>BeaverWorks Summer Institute</u>	MIT	Engineering, CS, AI, Robotics	N/A	See website	4 weeks	Rising Seniors Only	Tuition FREE Room & Board \$5,000
<u>BU RISE</u>	Boston University	All STEM categories	6% (130/800)	February 14	6 weeks	Rising Seniors	\$4650 tuition Room & Board \$2994
<u>Clark Scholars</u>	Texas Tech	Every Major	12 students only	February 10	7 weeks	17 years +	\$750 stipend + Room & Board
<u>The Garcia Program REU</u>	Stony Brook University	Polymer Research	N/A	February 24	7 weeks	16 +	Lab Fees \$2700 Room & Board additional costs

My Tier 1 Internship Recommendations

<u>Science and Engineering Apprenticeship Program (SEAP)</u>	Playa Vista, CA (Dept. of Defense) + Out of State	Data, STEM	N/A	February 28		16 +. Rising Juniors / Seniors	Stipend Room & Board N/A
<u>High School Apprenticeship Program (HSAP)</u>	USC (Army / Dept. of Defense)	STEM Research	N/A	February 28	8 - 10 weeks	Rising Juniors / Seniors	Stipend
<u>High School Honors Science, Math and Engineering Program (HSHSP)</u>	Michigan State	All STEM	24~	March 1	7 weeks	Rising seniors	\$3,800
<u>Genomics Research Internship Program (GRIP)</u>	Stanford	Genomics, CS	N/A	March 2	8 weeks	16+ / Bay Area HS	Free
<u>Laboratory Learning Program</u>	Princeton	Engineering + Natural Science Research	N/A	March 15	5 - 6 weeks	16 +	Free (Room & Board N/A)

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My Tier 1 Internship Recommendations

Lincoln Laboratory Radar Introduction for Student Engineers (LLRISE)	MIT	Radar Systems	N/A		2 weeks	Rising senior	Free (Room & Board included)
The Management & Technology Summer Institute (M&TSI)	UPenn	Tech / Entrepreneurship	50 - 75	February 1	3 weeks	Rising seniors (select juniors)	\$7,500
The Science and Engineering Apprenticeship Program (SEAP)	Multiple US Navy + Dept. of Defense Labs	STEM	250	Nov 1	8 weeks	9+	\$3500 stipend No Housing
Stem Enhancement in Earth Science (SEES)	NASA @ UT Austin	Earth / Space research	11% (45/500)	February 22	2 weeks	Rising junior / senior	FREE: Tuition + Room & Board
Simons Summer Research Program	Stony Brook University	Multiple STEM	8%	January 22	5 weeks	Rising senior	\$3200 Residential

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My Tier 1 Internship Recommendations

<u>Summer Science Program (SSP)</u>	Multiple	Astrophysics, Biochemistry	10%	February 28	5 weeks	Rising seniors	Heavy Financial Aid
<u>Student Science Training Program (SSTP)</u>	U Florida, Gainesville, FL	Multiple research	accepts 90 students	Dec - Feb (rolling) March 1 (priority)	7 weeks	Rising senior	\$4800 (including housing)
<u>Stanford Institutes of Medicine Summer Research Program (SIMR)</u>	Stanford, CA	Biomedical (multiple research labs)	accepts 50 students	February 23	8 weeks	juniors / seniors	\$500 minimum stipend
<u>Research Science Institute (RSI)</u>	MIT	STEM	accepts 80 students	January 15	7 weeks	Rising seniors	Cost-Free (includes residential)
<u>Science Internship Project (SIP)</u>	UC Santa Cruz	Multiple STEM	Accepts 165 students	March 21	8-10 weeks	14+ (favors rising seniors)	\$3300 tuition (non-residential)
<u>Women's Technology Program (WTP)</u>	MIT	EECS or ME (Mechanical)	11% (60/700)	January 15	4 weeks	Rising seniors (favors underserved)	\$3500 maximum

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My Tier 1 Internship Recommendations

<u>International Summer School for Young Physicists (ISSYP)</u>	Waterloo, Ontario, Canada	Physics	Accepts 20 Canadian / 20 Int'l	March 25	2 weeks	junior / senior	\$500 Canadian
<u>Yale Program in Astrophysics (YSPA)</u>	Yale U	Astrophysics + STEM	Accepts 32 students	Value	2 week online + 4 week residential	Rising senior	\$6100 (Tuition + Residential)
<u>Young Scholars Program (YSP)</u>	UC Davis	Natural Sciences	10% - 12% Accepts 40 students	March 16	6 weeks	10 - 12	\$6,500 tuition + residential
<u>SSTP (Secondary Student Training Program)</u>	U Iowa	Multiple STEM	N/A	January 10	5 weeks	Rising junior / senior	\$6,395 (Tuition + Residential)
<u>Stanford Young Earth Investigators</u>	Stanford	Earth Sciences	0.04% (7/150 accepted in 2019)	March 15	7 weeks	Rising 10th-12th + 25-miles to Stanford	Free

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SPACETIME ARCHIVES STUDENT RESEARCH FELLOWSHIP

A middle and high school research program created by Rishika Porandla and conducted in collaboration with Texas Astronomical Society (TAS) subject-matter experts and NASA intern alumni mentors

what?

Pursue scientific research

The Spacetime Archives Student Research Fellowship enables middle school and high school students to pursue a mentored, introductory research project. We give you the resources, you give your field of study something to talk about.



what?

why?

how?

Pursue scientific research

The Spacetime Archives Student Research Fellowship enables middle school and high school students to pursue a mentored, introductory research project. We give you the resources, you give your field of study something to talk about.

Build opportunities and exposure

Finding research opportunities as a student is hard. Other programs have a frustrating expectation of "previous research experience," but our Student Research Fellowship breaks down those barriers and gives you access to data, mentors, and lessons free of pressure and free of charge. You will be given the opportunity to publish your work in journals and present at scientific conferences.

Pick your field of study and work on a complex research inquiry

You will first select your preferred field of study (astrophysics, earth sciences, or aerospace) and then will be assigned a high school or undergraduate mentor who will provide you with research and data analysis resources. After the 3 month researching period, you will produce a research abstract ready for publication.



APPLICATIONS ARE DUE FEBRUARY 4, 2023
AT 11:59 PM CST.

APPLY AT OUR WEBSITE

or contact us at rishika@spacetimearchives.com



spacetimearchives.com/outreach



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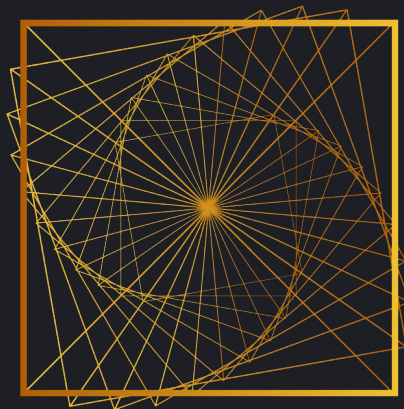
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PUBLISHING AND CONFERENCES

Research Papers & Abstracts

- Many summer programs encourage students to publish research, but some require a research abstract and poster presentation as a final product while others require a full research paper.



Scientific Conferences

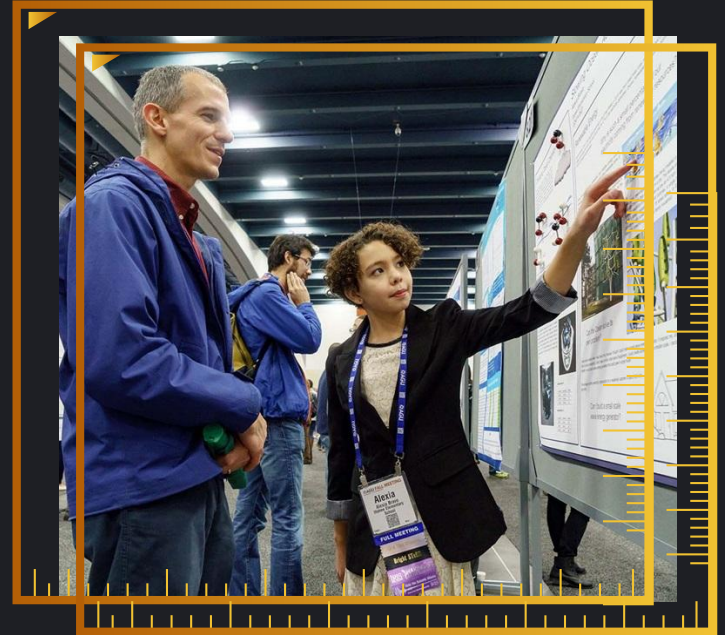
- Regardless of whether your summer program expects you to submit your work to a scientific conference, most conferences do not have an submission age limit so *anyone* can submit their research.
- However, though this is true, conferences generally do not accept research that is of low quality, meaning that most student acceptances are from summer programs.

AGU BrightStars Program

How the Program Works

Participating students are required to submit at least one abstract, which may be a group abstract, by the Fall Meeting abstract deadline in July. The student must be the lead author on the abstract and no late abstracts are allowed. Students presenting through Bright STaRs will receive:

- 1 — Publication of their abstract in the Fall Meeting abstract database
- 2 — A dedicated morning poster session in the Fall Meeting poster hall to present their research
- 3 — A complimentary registration that allows them to attend scientific sessions and exhibits at the Fall Meeting
- 4 — Access to the Fall Meeting academic showcase, which offers information on approximately 40 institutions offering Earth and space science undergraduate and graduate degree programs
- 5 — A luncheon with AGU leaders
- 6 — Time to explore and learn by visiting the exhibit hall, attending an oral session, or reviewing posters in the poster hall



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THANK YOU!

“What I am going to tell you about is what we teach our physics students in the third or fourth year of graduate school... It is my task to convince you not to turn away because you don't understand it. You see my physics students don't understand it... That is because I don't understand it. Nobody does.”

– *Richard Feynman*

