Jack Sheehan

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EDUCATION

Harvard University

- Ph.D. Earth and Planetary Sciences — (Expected) 2027
  - Secondary Field Data Science
- A.M. Earth and Planetary Sciences — (Expected) 2025

Rice University

- B.S. Earth, Environmental, & Planetary Sciences — 2022
- B.A. German Studies — 2022

SELECT HONORS

Future Investigator in NASA Earth and Space Science and Technology, NASA — 2024
Michael H. Freilich Data Visualization Competition Runner Up, AGU — 2024
Teaching Fellow Special Recognition, Harvard Undergraduate Association — 2023
Early Career Scientist Award, International Union of Crystallography — 2023
Earth and Planetary Science Merit Award, Harvard University — 2022
Distinction in Research and Creative Work, Rice University — 2022
Distinction in Research and Creative Work, Rice University — 2022
Sam Worden Endowed Memorial Award in Geophysics, Rice University — 2022
National College Champion Semifinalist, Jeopardy! — 2021

RESEARCH EXPERIENCE

Science Mission Design School, NASA JPL — 2025
Graduate Research Assistant, Harvard University — 2022–Present
Undergraduate Research Assistant, IRIS — 2021
Undergraduate Research Assistant, SCEC — 2021

TEACHING EXPERIENCE

Bok Teaching Certification, Harvard University — 2023–Present
Graduate Teaching Fellow, Harvard University — 2022–Present

PUBLICATIONS

J. Sheehan, Q. Zhai, Y. Chuang, T. Officer, Y. Wang, Z. Peng. 2025. "Applying EQTransformer to laboratory earthquakes: detecting and picking acoustic emissions with machine learning." *Earth, Planets and Space* 77, 116. https://doi.org/10.1186/s40623-025-02237-2.

J. Sheehan, Q. Zhai, Y. Chuang, T. Officer, Y. Wang, Z. Peng. 2022. "Machine learning detection of P-waves in laboratory acoustic emission events." *Rice University Research Repository*. doi.org/10.25611/MF2H-9609.

J. Sheehan, A. Oesmann. 2021. "Die Lautere Wahrheit: Tatsachenphantasie in Döblins und Fassbinders Berlin Alexanderplatz." *Rice University Research Repository*.

SELECT PRESENTATIONS

"From Atoms to Planets," *AGU Data Visualization Student Showcase*. [Talk] 2025

"Listening to Labquakes with Machine Learning," *Seismology Student Workshop.* [Talk] 2025

"Did Earth Have a Late Veneer? Determining the Behaviors of Highly Siderophile Elements During Core Formation," *AGU Fall Meeting*. [Poster] 2024

"Constraining Late Accretion From Metal–Silicate Partitioning of Highly Siderophile Elements During Core Formation," *AGU Fall Meeting*. [Poster] 2023

"Applying EQTransformer to Laboratory Earthquakes: Detecting and Picking Acoustic Emissions," *Study of Earth's Deep Interior GRC*. [Poster] 2023

"Earthquake Music: Utilizing Machine-Learning to Detect Acoustic Emission Events," *Rice Shapiro Showcase.* [Invited Talk] 2022

"Anticracking During Olivine's Transition to Ringwoodite as a Mechanism for Deep-Focus Earthquakes," *Graduate Interdisciplinary Earth Science Symposia*. [Talk] 2022

"Machine Learning Detection of P-Waves in Laboratory Acoustic Emission Events to Understand the Mechanics of Deep-Focus Earthquakes," *AGU Fall Meeting*. [Poster] 2022

"Using Machine Learning to Detect Laboratory Nanofractures," *Rice Natural Sciences Research Fair*. [Poster] 2021

"Acoustic Emission Detection of Deep-Focus Earthquakes Using EqTransformer," *FRES Intermediate Depth Earthquake Group Annual Meeting*. [Invited Talk] 2021

OUTREACH AND SERVICE

SEI Ambassador, SOtL Nanotechnology and Policy 2025

Undergraduate Mentor, PhannyPacc Phan 2025–Present

Science Education Partner, Harvard Museums of Science and Culture 2024–Present

Graduate Mentor, Graduate Admissions Assistance Program 2024–Present

Alumni Interviewer, Rice Alumni Volunteers for Admission 2022–Present

Mineral & Geologic Archival Volunteer, Harvard Museum of Natural History 2022–2023