

Karim Lakhani

Georgia Institute of Technology ♦ Earth and Atmospheric Science (EAS)
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Education

PhD Candidate in Earth and Atmospheric Science (EAS)

Georgia Institute of Technology (Georgia Tech), Atlanta, Georgia, United States (US) August 2018 - present
Advisor: Jean Lynch-Stieglitz

Bachelor of Science in Chemical Engineering

California Institute of Technology (Caltech), Pasadena, California, US September 2014 - June 2018
Specialized in Environmental Science and Engineering

Research Experience

Graduate Research/Teaching Assistant

Advisor: Jean Lynch-Stieglitz, Georgia Tech (2018-current)

Topic: Investigating Ocean-Atmosphere Interactions with Planktonic Foraminifera in the Tropical Pacific during the Last Glacial Maximum (LGM)

Summer Undergraduate Research Fellow (SURF)

Advisor: Tapio Schneider, Caltech (2017)

Topic: Atmospheric Energy Balance and its effect on the Intertropical Convergence Zone in CMIP5 and PMIP3 models

Advisor: Mitchio Okumura, Caltech (2016)

Topic: Ethane as a Marker for Thermogenic Methane in Aliso Canyon

Advisor: Geoffrey Smith, University of Georgia, Athens, Georgia, US (2015)

Topic: Development of a three-wavelength cavity ring-down spectrometer

Publications

K.Q. Lakhani, J. Lynch-Stieglitz, M.M. Monteagudo, Constraining Calcification Habitat using Oxygen Isotope Measurements in Tropical Planktonic Foraminiferal tests from Surface Sediments, *Marine Micropaleontology*, 170, 102074, doi.org/10.1016/j.marmicro.2021.102074, 2022

Teaching Experience

Grader for EAS 4300: Oceanography, Spring 2022

Georgia Tech

- Assisted professor of record in creating answer keys and grading student assignments

Grader for EAS 6500: Climate and Global Change, Fall 2021

Georgia Tech

- Assisted professor of record in creating answer keys and grading student assignments

Teaching Assistant for EAS 4350/6136: Paleoclimatology and Paleooceanography, Spring 2021

Georgia Tech

- Assisted professor of record in creating data analysis projects suitable for reinforcing course objectives
- Guided students on understanding climate data and performing analyses

Teaching Assistant for EAS 1601: How to Build a Habitable Planet, Spring 2019, Fall 2019, Fall 2020

Georgia Tech

- Taught 2 sections of ~20 students in a laboratory setting
- Proctored and graded exams and labs for the class

Teaching Assistant for SA 16: Cooking Basics, Winter 2018 - Spring 2018

Caltech

- Taught groups of 6-12 students how to cook and helped cook a set of recipes every week

- Designed a set of recipes for an Indian cuisine menu
- Led a group as head chef in creating a five-course meal

Conference Presentations

K.Q. Lakhani, J. Lynch-Stieglitz, M.M. Monteagudo, Constraining Tropical Thermocline Structure using Oxygen Isotope Measurements in Planktonic Foraminiferal Tests from Multiple Species, American Geophysical Union Fall Meeting Poster Presentation (2021)

K.Q. Lakhani, J. Lynch-Stieglitz, E. Di Lorenzo, M.M. Monteagudo, Planktonic Foraminifera, Upper Ocean Density, and Surface Winds, Comer Climate Conference Poster Presentation (2020)

K.Q. Lakhani, J. Lynch-Stieglitz, M.M. Monteagudo, Global Spatial Trends in the Apparent Calcification Depth for Planktonic Foraminifera from the Late Holocene

- American Geophysical Union Fall Meeting Poster Presentation (2019)
- Comer Climate Conference Oral Presentation (2019)
- Georgia Tech EAS Graduate Student Symposium Oral Presentation (2019)

Volunteer Experience

Treasurer, Graduates in Earth and Atmospheric Science

March 2020 – August 2021

- Coordinated organization funding and managed spending for events

Student Recruitment Chair, Graduates in Earth and Atmospheric Science

January 2019 – March 2020

- Coordinated the Prospective Students weekend for the department and provide input to the graduate student organization in the department

Community Consulting Team Project

January 2019 – May 2019, January 2020 – June 2020

- Assisted the non-profit organization “Keep North Fulton Beautiful” in reevaluating their business model and diversifying funding sources for 2019 project
- Assisted the non-profit organization “Community Farmers Market” in developing a transition plan for how they organize their data on customers, vendors, and donors for 2020 project

Ruddock House Social Manager

April 2016 – January 2018

- Managed a team of 5 students to organize, set up, and clean up social events for Ruddock dormitory

Accolades

Research Excellence award, GT EAS department, 2022

Comer Climate Fellow, 2019-present

Interviewed for Caltech Associates newsletter, 8/8/2018, <https://associates.caltech.edu/news/climate-mathematician-summer-researcher-explores-future-solutions>

The Associates SURF Fellow, 2017

James J. Morgan SURF Fellow, 2016

Outreach

Volunteer judge, Undergraduate Research Symposium, Georgia Tech (2019)

Volunteer presenter, Haunted Lab Tours, Georgia Tech EAS Department (2018)

Session Convener, Graduate Student Symposium, Georgia Tech EAS Department (2018)